Exhibit 8

UNITED STATES PATENT AND TRADEMARK OFFICE
——————

BEFORE THE PATENT TRIAL AND APPEAL BOARD
——————

GOOGLE LLC,
Petitioner,

v.

NEONODE SMARTPHONE LLC,
Patent Owner

——————

Case IPR2021-01041
Patent 8,095,879

——————

**PATENT OWNER'S DEMONSTRATIVE EXHIBITS
(EXHIBIT 2063)**

Google LLC v. Neonode Smartphone LLC

IPR2021-01041
U.S. Patent No. 8,095,879

Neonode Smartphone LLC
October 17, 2022

Nathan Lowenstein
Parham Hendifar
Lowenstein & Weatherwax LLP

The Petition Presents Robertson And Tarpenning Grounds

Ground	Claims	§ 103 Basis
1	1-5, 13, 15-17	Rendered obvious by Robertson and Maddalozzo
2	6-7, 9	Rendered obvious by Robertson, Maddalozzo, and Vayda
3	12	Rendered obvious by Robertson, Maddalozzo, and Bedford-Roberts
4	1, 4-6, 13, 15-17	Rendered obvious by Tarpenning
5	2-3, 7, 9	Rendered obvious by Tarpenning and Vayda
6	12	Rendered obvious by Tarpenning and Bedford-Roberts

Table Of Contents

1. **Secondary Indicia**

2. Robertson Grounds:

    i.   "gliding … away" (All Claims)

    ii.   One-Option limitation (All Claims)

    iii.   Computer Program Code "read by a mobile handheld computer unit" (All Claims)

    iv.   "a mobile handheld computer unit" (All Claims)

    v.   Robertson Is Not Analogous Art (All Claims)

3. Tarpenning Grounds Fail To Show "gliding … away" (All Claims)

Neonode Phone Introduced In 2002, Years Before Apple's iPhone (2007) And Petitioner's Android System (2008)
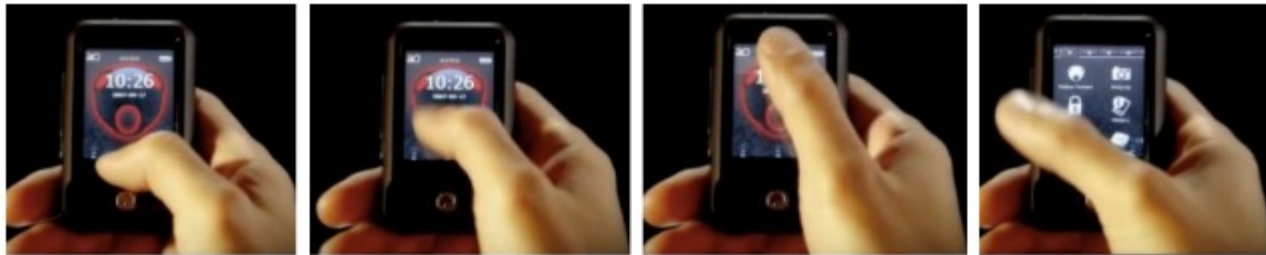
Ex. 2020 [N2-Advertisement-Video] (00:26-00:27)

Core Feature Was Swipe-Based User Interface

Applicant: "Swipes" Correspond To The Claimed "Gliding … Away" As Shown In N2 Video

Interview agenda :

For the interview, I would like to discuss the attached draft proposed amendment. Specifically, I would like to discuss the touch-and-glide thumb movement, variously referred to as "swiping", "rubbing", "gliding" and "sliding". This movement is described in claim 1 as "an object touching a location in the touch sensitive area at which the representation of the function is displayed and then gliding along the touch sensitive area away from the location."

Ex. 1002 [Prosecution History] 273

RESPONSE TO NON-FINAL OFFICE ACTION

significant portion of the small screen during a navigation operation. For a demonstration of a number of features disclosed in the current patent application and covered by the claims therein and in the present Response, the Examiner is encouraged to access http://www.neonode.com/en-us/on-stage/products/n2/introduction/ and watch the video demonstration of the N2 mobile phone/personal digital assistant device made by Neonode AB. The N2 device and its

Ex. 1002 [Prosecution History] 214-215

Neonode's N1 Phone (2002) Was The First Swipe-Based Smartphone— Years Before iPhone (2007) And Google's Android OS (2008)

Ex. 2040 [Hollatz-Dissertation] 8,

Figure 3. The Neonode N1 was the first mobile to use swipe gestures [46]

Figure 11: The first smartphone to support touch gestures:

Ex. 2039 [PhD-Dissertation] 9

Ex. 2024 [Pen-Computing-Magazine-N2-Review] 1

"And ***if the iPhone's swipes and taps seem futuristic, they are not***. Neonode has been using them since the first N1 came out. In fact, ***the company's Neno user interface is based entirely on swipes*** and taps. ***[I]t must be vexing to see Apple essentially claim ownership of concepts the Neonode phone has been using for at least five years***"

Users Compared Neonode's "Original" "Sweeping Touch Screen" With iPhone "Copycat"

7

Neonode Phones' Swiping Interface Received Effusive Praise

Pen Computing

Ex. 2013 [Pen-Computing-Magazine-N1-Review] 2-3

"*swipe, swipe, swipe* … If this sounds like the dreaded "gestures" that never really caught on in pen computing, it's not. *The swipes are much simpler*. … Neonode's *swiping interface is [] simple and brilliant*"

TRENDHUNTER CREATE THE FUTURE

Ex. 2031 [Trend-Hunter-Article] 1

"designed for *advanced simplicity*. *You do everything on screen, simply and conveniently, with just one finger*."

RCRWireless INTELLIGENCE ON ALL THINGS WIRELESS

Ex. 2035 [iPhone-Killer] 2

"*the strongest contender for the title of 'iPhone killer,'* … the screen reacts to *the intuitive passage of a finger* over the screen to initiate basic phone …"

Pen Computing

Ex. 2013 [Pen-Computing-Magazine-N1-Review] 5

"The Neonode phone is *quite obviously unique*, ... The *user interface is compelling* …. *The speed is simply amazing. That's the way a phone should operate*."

HOME ▸ TNKGRL MEDIA

tnkgrl Media

Ex. 2033 [tnkgrl-Media-post] 1

"definitely a best kept secret device–Neonode's touch-based *user interface with gesture recognition ... is extremely intuitive* …"

Neonode Phones' Swiping Interface Received Effusive Praise

Tom Goedkoop 13 years ago
well, it's just a good phone, the sweeping works great, and the connection with the network is good (sorry for my english, it's not my best class:P)

Rayen Marzougui 4 years ago
im in 2017 and i love this phone

Michael Angelo 10 years ago
Neonode adapt their fast & responsive touchscreen on this phone, of which this company is famous for.

athanasiothegr8 10 years ago
My favorite phone. It has the fastest touchscreen and the most beautiful touch and an easy UI but the battery is weak and it has huge SAR.

NE0TIMELESS 3 years ago
I am still using it :) works perfect

spaided 12 years ago
I have this phone and its GREAT!!! Not a single problem at all!!

Stormwolf420 10 years ago
I own this phone, it turns a lot of heads, and it's an EXCELLENT phone, too, the swiping is more intuitive than I thought, and once one gets the hang of it, this is the bets touch screen ever. I had to import mine from Malaysia, and was slapped with a HUGE import fee, but hell, for a phone as unique looking and as good as this one, it was worth every penny!

Samsung Praised And Licensed The Application From Which '879 Patent Issued

'879 Application Was One Of Only Two Licensed Applications, And Specifically Called Out In The Agreement

The [Neonode] mobile handsets are based on the light beam controlled touch-screen, "zForce", ***and software for interaction with the operating system of the device***, ***"Neno".*** Neonode is in possession of technology, - including zForce ***and Neno*** – intellectual property rights and know-how for development of mobile handsets (the '"Neonode IPR")

Ex. 2014 [Samsung-Agreement] 2

LICENSE

Neno; USA patent application, (Application no 10/315,250; Title: "User Interface", application filed December 10, 2002).

US 8,095,879 B2

(21) Appl. No.: **10/315,250**

(22) Filed: **Dec. 10, 2002**

Neonode Phones Practiced The Claimed Inventions

DECLARATION OF JOSEPH SHAIN

4. I am personally familiar with the operation of the user interface of the Neonode N1 and N2 phones, having used the phones many times.

5. The Neonode N1 and N2 phones were mobile handheld devices that included a memory, a processor and a touch-sensitive display. The memory stored code that, when executed by the processor of the phone, presented a user interface on the touch-sensitive display.

6. Both the Neonode N1 and N2 presented three icons in a strip along the lower edge of the display immediately following unlocking of the phone. One of the icons represented the Start Menu, one represented the Keyboard Menu, and the third represented the Tools Menu. Each of the icons consisted of only one option for activating the associated function. Each of the icons were activatable by a gesture in which a thumb or finger touches the icon, and swipes up toward the center of the screen before lifting off of the screen. None of the icons were relocated or duplicated during the swiping gesture.

Ex. 2008 [Shain-Decl.] ¶¶4-6

Patent No.: US 8,095,879 B2

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

Petitioner's Attorney Argument: Video Shows N1/N2 Phones Activated Icon By Flick, Not Glide
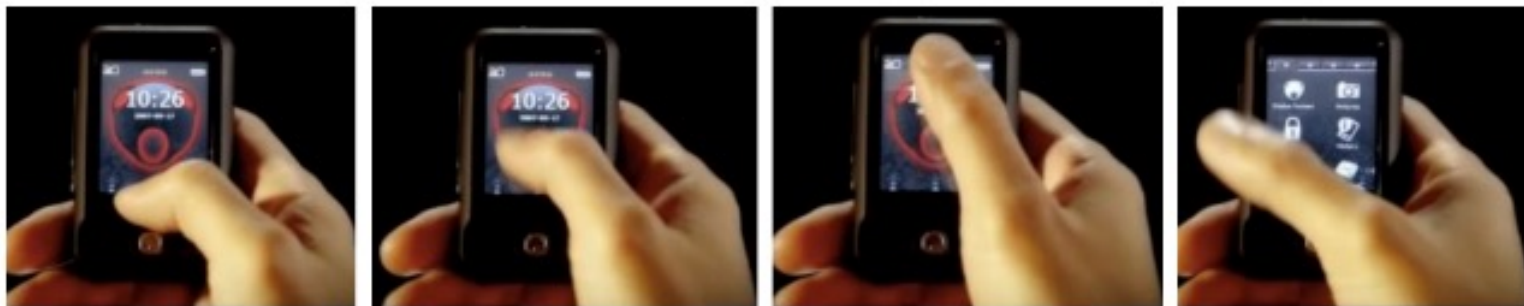
Refuted by the smooth, effortless glide shown in the video

Sur-Reply, 22; Ex. 2020 [N2-Advertisement-Video] 00:24-00:28   13

Petitioner: Arrows Are "Relocated Or Duplicated" During Gliding

PETITIONERS' REPLY

Neonode's phones do not include the "representation of the function is not relocated or duplicated during the gliding" because the icon (arrows) is duplicated during the gliding, as shown below. POR 33 (describing "representation" in

Neonode Phones' "Representation Of Function" Were Printed Icons That Were Not "Relocated Or Duplicated" During Gliding

"the Neonode N1 and N2 presented ***three icons in a strip along the lower edge*** … ***None of the icons were relocated or duplicated*** during the swiping gesture."

Ex. 2008 [Shain-Decl.] ¶6

> Q.   And on the N2 on right-hand side, there's also three icons in a strip printed onto the device of the screen?
>
> A.   Yes.
>
> Q.   Okay. Do those icons function the same way between the N1 and N2?
>
> A.   Yes.

Ex. 1044 [Goertz] 151:20-152:7

Three icons that are not relocated or duplicated

Arrows Were Not "Relocated Or Duplicated" <u>During</u> Gliding, But <u>Upon Touch And Before Glide</u> To Show Possible Pathways
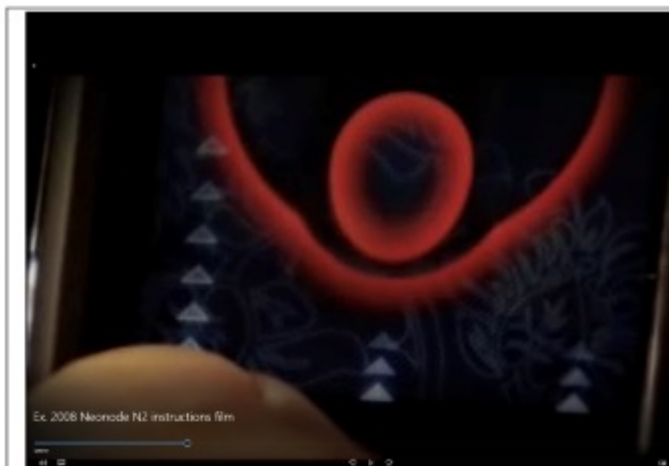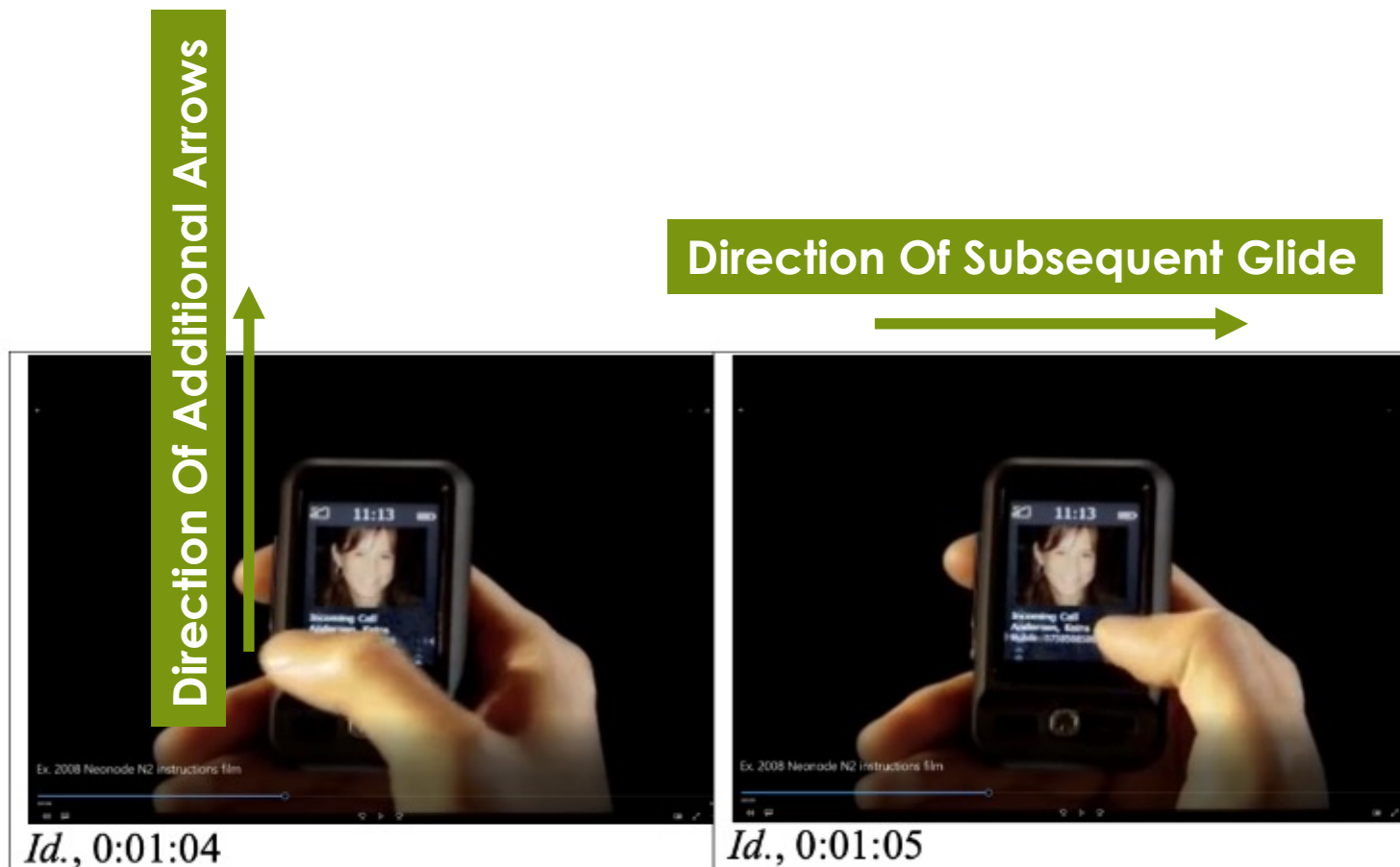

Ex. 2008, 0:00:40
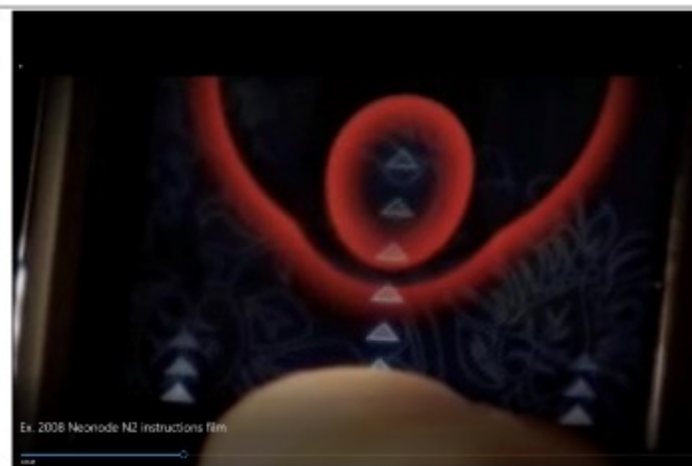
Id., 0:00:41
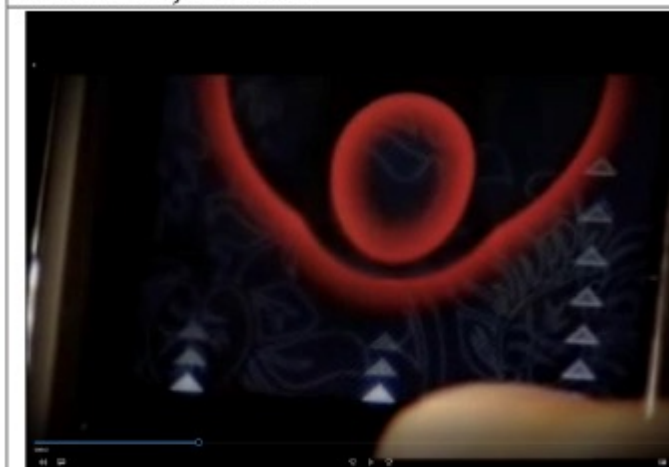
Id., 0:00:43

Additional Arrows Can Be Perpendicular To The Direction Of The Subsequent Glide

Direction Of Additional Arrows

Direction Of Subsequent Glide

Id., 0:01:04

Id., 0:01:05

Petitioner's Ex-1048 Still Praised Neonode's "Swipe" Even After iPhone And Six Years After '879's Filing, Only Criticized Other Phone Features

CNET Your guide to a better future

pressing a key. Despite the cool factor of using finger swipes to navigate the phone, in the end, our experience with the NeoNode N2 was hampered with mishaps due to the steep learning curve.

Ex. 1048, 5

To help you along, the N2 displays multiple arrows on the four corners of the screen to show you in which direction to swipe your finger. For example,

Ex. 1048, 4

interface in the end. If you want to see it for yourself, you'll have to purchase it unlocked at a rather steep price of about $860.

Ex. 1048, 3

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2. **Robertson Grounds:**

    i.   **"gliding … away" (All Claims)**

    ii.   One-Option limitation (All Claims)

    iii. Computer Program Code "read by a mobile handheld computer unit" (All Claims)

    iv.   "a mobile handheld computer unit" (All Claims)

    v.   Robertson Is Not Analogous Art (All Claims)

3. Tarpenning Grounds Fail To Show "gliding … away" (All Claims)

Petitioner Fails Prove "Gliding ... Away"

Patent No.:   **US 8,095,879 B2**

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

Petitioner Relies On Robertson's "Flick" And "Insert" Gestures To Disclose "gliding … away"

PETITION

Robertson's "dialphone" function is activated by a multi-step operation of placing a pen on the phone button, then sliding the pen to the right along the touch-sensitive interface to perform a "flick right" gesture. Ex-1005, §§ 3-3.1; Ex-1003,

Pet., 25

The "xbedit" function to open a button editor is activated by a multi-step operation of touching a pen (or finger) on the phone button, then sliding the pen away from the initial touched location in the shape of a caret to perform an "Insert gesture." Ex-1005, § 3.2; Ex-1003, ¶108. For this multi-step operation, the user

Pet., 26-27

Petitioner Assumes That Flick/Insert Disclose "gliding … away" Because It Equates A "Glide" With Any Movement

PETITION

¶107. This multi-step operation is shown below, where the user touches the

"Phone" button (blue, representation) with the pen/stylus and moves (glides) the

Pet., 25-26

gesture." Ex-1005, § 3.2; Ex-1003, ¶108. For this multi-step operation, the user

touches the "Phone" button (blue) with the pen/stylus and glides (moves) the pen

diagonally up and right, then diagonally down and right in a caret shape (^,

orange), which is tracked by the gesture parser and drawn on the screen. Ex-1005,

§§ 3-3.2, 4.2; Ex-1003, ¶108.

Pet., 27

Petitioner Provided No Construction Of "gliding … away" To Show Why It Encompasses A "Flick" Or "Insert" (Caret)

PETITION

III.   Claim Construction

No terms need to be construed to resolve unpatentability. *Realtime Data,*

LLC v. Iancu, 912 F.3d 1368, 1375 (Fed. Cir. 2019).

Pet., 4

Petitioner Presented No Other Evidence As To Why A "Glide" Encompasses A "Flick" Or "Insert" (Caret) Gesture

Plain Meaning Of "Glide" And "Flick" Are Distinct

Dictionary		"Flick"	"Glide"
Merriam Webster [Ex. 2052]	1993	"a light sharp jerky stroke or movement"	"to move smoothly continuously and effortlessly"
American Heritage College Dictionary [Ex. 2050]	1997	"a light quick blow, jerk or touch"	"to move in a smooth effortless manner"
Oxford English Dictionary [Ex. 2057]	2002	"make or cause to make a sudden sharp movement"	"move with a smooth, quiet, continuous motion"
Oxford English Dictionary [Ex. 2049]	2012	"make a sudden sharp movement"	"move with a smooth quiet motion"

Common Usage: "Glides" And "Flicks" Are Different

Flick
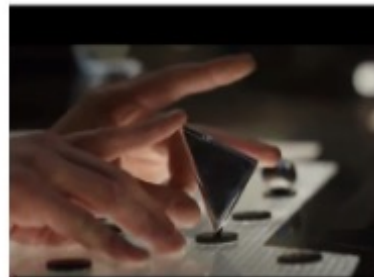
Glide

Smartphone Manufacturers Distinguish Between "Flick" And "Swipe" (*i.e.*, "Glide")

Flick. Scrolls or pans quickly.

Swipe. When performed with one finger, returns to the previous screen, reveals the hidden view in a split view controller, reveals the Delete button in a table-view row, or reveals actions in a peek. When performed with four fingers on an iPad, switches between apps.

Swipe. When performed with one finger, returns to the previous screen, reveals the hidden view in a split view controller, reveals the Delete button in a table-view row, or reveals actions in a peek. When performed with four fingers on an iPad, switches between apps.

Users Recognize The Distinction Between "Flick" And "Swipe" (*i.e.*, "Glide")

iMore

1. Touch your finger to the gesture area at the very bottom of the iPhone 12 display.

2. Swipe up slightly. (Don't flick. Just keep your finger on the screen until you get a short way up, the pull away.)

Petitioner Google's Operating Systems Distinguish Between "Flick" And "Swipe" (*i.e., "Glide"*)

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

82.   The Android operating systems developed by Petitioner Google also differentiate between a swipe and flick.   For example, an Android application for cars recognizes a "flick" gesture in order to "simulate[] a fast spin of the rotary." Ex. 2025 [Test-Android-apps-for-cars] 21.   Similarly, Petitioner Google in release of Android 4.0 distinguished between a user "flick[ing] through photo stacks," and a user "swip[ing] left or right."   Ex. 2026 [Ice-Cream-Sandwich] 5.

Even Though A "Flick" And A "Glide" (*i.e.*, Swipe) Are Both Movements, They Are Distinct Just As Walking And Running Are Distinct Movement

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

84. Even though both a "swipe" and a "flick" involve moving the pen, they are distinct both in how they are applied as a user input gesture and their effects on the user—just as, for example, walking and running are similar and yet distinct movements. Both a "flick" and "swipe" may start by placing the finger at the same location on a touchscreen, and then moving the finger, but they differ in how the motion is applied: "gliding" as claimed (also known as swiping) is a relatively slower, smoother and longer motion, while "flick" is a sharper, faster and shorter movement.

Petitioner's Expert Chose Not To Address "Glide" v. "Flick" Even In His Second Declaration

"We also note the absence of further declaration testimony ... in support of Petitioner's Reply .... ***Such untethered reference to conclusory attorney-argument are insufficient*** ... [to show obviousness]"

Samsung Elecs. Co., Ltd. v. Elm 3DS Innovations, LLC,
IPR2016- 00393, Paper 62, 37 (PTAB Jun. 23, 2017)

Petitioner's Abject Failure Of Proof As To Why "Flick" Discloses "Glide"

Flick ≠ Glide

- **No** claim construction

- **No** plain meaning analysis

- **No** expert support or analysis

- **Refuted** by dictionary plain meaning (flick v. glide)

- **Refuted** by common usage

- **Refuted** by phone manufacturers' usage (flick v. swipe)

- **Refuted** by Petitioner's own usage of flick v. swipe outside of litigation

Petitioner's Response: "gliding … away" Should Be Construed To Encompass All Movement

PETITIONERS' REPLY

significant. Ex-1002, 334-341. Any interpretation other than "movement" renders

the claim invalid. *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d

Reply, 8

Prosecution History: Claims Were Changed From "moving ... from ... to" To "gliding ... away"

Original Pending Claim 1:

"… each of said first, second, and third functions simultaneously represented in said menu area being activated by the single step of a blunt object **moving** in a direction **from** a starting point that is the representation of the corresponding one of said first, second, and third functions in said menu area **to** said display area …"

Ex. 1002 [Prosecution History] 201

Applicant "Encouraged" Examiner To Watch N2 Video Demonstration Prior To Reviewing Applicant's Arguments

RESPONSE TO NON-FINAL OFFICE ACTION

significant portion of the small screen during a navigation operation. For a demonstration of a number of features disclosed in the current patent application and covered by the claims therein and in the present Response, the Examiner is encouraged to access http://www.neonode.com/en-us/on-stage/products/n2/introduction/ and watch the video demonstration of the N2 mobile phone/personal digital assistant device made by Neonode AB. The N2 device and its

disclosed in the current application. Applicant encourages the Examiner to view the demonstration video at the above-identified URL prior to reviewing Applicant's arguments

Ex. 1002 [Prosecution History] 214-215
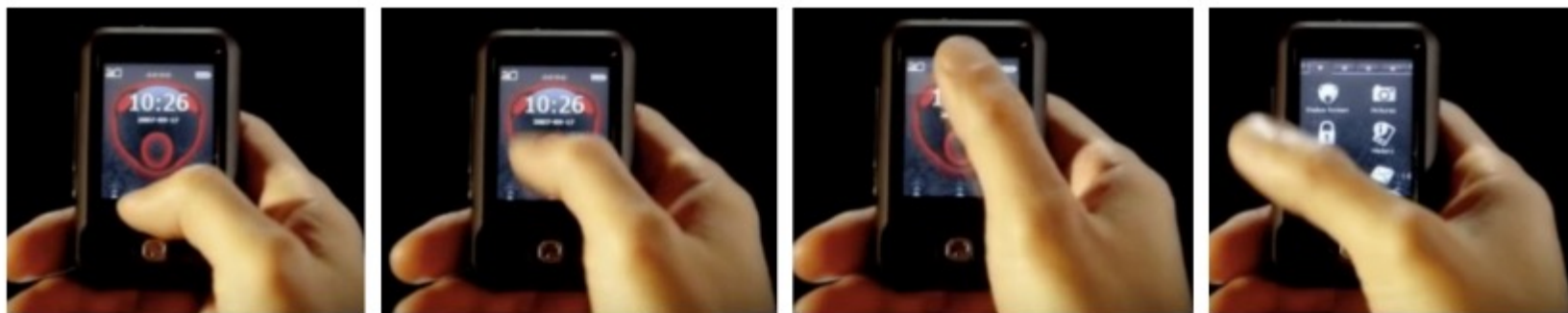
Ex. 2020 [N2-Advertisement-Video] (00:26-00:27)

Examiner "can now see the difference between prior art of record and present invention" "in light of the video demonstration"

Response to Arguments

The Examiner reviewed the demonstration as encouraged by the Applicant. In light of the video demonstration, the Examiner can now see the difference between the prior art of record and the present application. With that being said the Examiner feels that the limitations, as claimed, were reasonably interpreted and the current limitations are still too broad to suggest without research what was shown in the video

Ex. 1002 [Prosecution History] 258

After Examiner Interview, Applicant Changed "moving ... from ... to" To "gliding ... away" To "properly claim the … invention"

RESPONSE TO OFFICE ACTION

Applicant has withdrawn claims **19 – 47**, and amended

claims **1 – 15** to properly claim the present invention. No new matter

each function of said ~~first, second, and~~ ~~third functions simultaneously represented in said menu area~~ plurality of functions being mapped to a corresponding location in the touch sensitive area at which the representation of the function is displayed, and being activated by ~~the single step of a blunt~~ an object touching the corresponding location and then gliding along the touch sensitive area away from the location ~~moving in a direction from a starting point that is~~ ~~the representation of the corresponding one of said first, second, and~~ ~~third functions in said menu area to said display area~~ ~~being detected by~~

Ex. 1002 [Prosecution History] 317-318, 334

CAFC: Amendments To Change A Word "suggest[s] ... the new word differs in meaning in some way from the original word."

"when a word is changed during prosecution, the change tends to suggest that *the new word differs in meaning in some way from the original word*."

Ajinomoto Co. v. ITC
932 F.3d 1342, 1351 (Fed. Cir. 2019)

Petitioner's Expert "Did Not Recall" Whether "gliding … away" Was "A Point Of Focus" In His Review Of Prosecution History

DEPOSITION OF: DR. JACOB O. WOBBROCK

23   In determining whether the claim term gliding
24   away is disclosed by your grounds, did you consult the
25   prosecution history of the patent?

8   A   My answer would be the same as for the last
9   question, I consulted the prosecution history as a step
10   in my analysis. I do not recall whether that particular
11   phrase was a point of focus that arose in my consultation
12   of the prosecution history or not.

Applicant Never Equated "Gliding" To A "Flick"

Interview agenda :

For the interview, I would like to discuss the attached draft proposed amendment. Specifically, I would like to discuss the touch-and-glide thumb movement, variously referred to as "swiping", "rubbing", "gliding" and "sliding". This movement is described in claim 1 as "an

Ex. 1002 [Prosecution History] 273

RESPONSE TO OFFICE ACTION

include finger taps and movements. One such movement is a "rubbing" / "swiping" / "touch-and-glide" movement, whereby a finger touches a touch-sensitive screen at a location where an icon for a function is displayed, and then rubs / swipes / glides, along the touch screen away

Ex. 1003 [Prosecution History] 390

Applicant Never Equated "Glide" With "Drag"
Irrelevant: Drag ≠ Flick

AMENDMENT AND RESPONSE TO OFFICE ACTION

Applicant notes that in FIG. 7, from step 100 (START) through step 107, function activation occurs solely in response to a hard touch on an associated icon, irrespective of whether or not a drag is performed.

Some distinctions between claimed invention and Hoshino		
	Claimed invention	**Hoshino**
Objective	Novel touch-and-glide user interface operation	Discriminate between two conventional operations; namely, (1) touch, and (2) drag-and-drop
Hardware	Touch screen	Touch screen with pressure sensor
Function Activation	In response to both steps of a multi-step operation; namely, (1) touch, followed by (2) a glide	In response to hard touch

Hoshino does not teach gliding a finger away from an icon. Instead, Hoshino teaches a drag-and-drop operation for moving an icon. In

Flick ≠ Drag

Flick
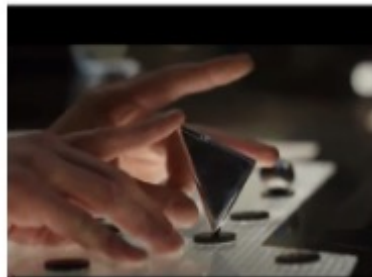
Drag

Flick v. Glide Is Not An Arbitrary Distinction

DEPOSITION OF CRAIG ROSENBERG, PhD

16   And, by the way, that one number in my
17 analysis would also depend. It would probably
18 depend on many different things. It would depend
19 on the screen size. It would depend on the
20 resolution of the screen. It would probably depend
21 on the input device, whether you're using a stylus,
22 whether you're using a light pen, whether you're
23 using a finger. It would probably depend on the
24 task.
25   So it's -- the question, I think, is -- I
1 don't want to say your question is flawed because I
2 certainly don't want to be disrespectful. But I
3 think that one number doesn't suffice to answer
4 that question what the difference between a flick
5 and a glide. It would really depend on so many
6 attributes of both systems anyway.

Petitioner: Interpreting "Gliding" As Anything Other Than All Movement Lacks Written Support

PETITIONERS' REPLY

Neonode argues that "gliding" is a single, specific type (species) of broad "movement" category (genus). POR 32-35. Accepting Neonode's argument renders all claims invalid for lack of written description and cannot be correct. *Ruckus Wireless, Inc. v. Innovative Wireless Sols., LLC*, 824 F.3d 999, 1004 (Fed. Cir. 2016) (declining construction that "would likely render the claims invalid for lack of written description").

Reply, 7

Construction To Preserve Validity Is The Last Resort And Does Not Apply Where Plain Meaning And Intrinsic Record Are Clear

"[U]nless the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous, the axiom regarding the construction to preserve the validity of the claim does not apply."

Liebel-Flarsheim Co. v. Medrad, Inc.
358 F.3d 898, 911 (Fed. Cir. 2004)

Written Description Is Not An IPR Issue And Cannot Overcome The Plain Meaning And Intrinsic Record

"*written-description* … *could not have been, part of the inter partes review* that is now before us. … Sipnet's arguments about *insufficient support for the claims if they are given their plain meaning ... do not alter our conclusion about claim construction*."

Straight Path IP Grp., Inc. v. Sipnet EU S.R.O., 806 F.3d 1356, 1363 (Fed. Cir. 2015)

"compliance with the *written description* requirement … *is not an issue that Petitioner is permitted to raise in the Petition*."

Apple Inc. v. OpenTV, Inc., IPR2015-00969, Paper 30, 19 (PTAB Sept. 20, 2016)

The Specification Need Not Say "Glide"

"Accordingly, we conclude that ***the Board placed undue weight on the absence of the terms in the specification***. … Our conclusion … further ***supported by the figures of the patent***, the specification, and the claim language."

Blue Calypso, LLC v. Groupon, Inc.,
815 F.3d 1331, 1346 (Fed. Cir. 2016)

Fig. 2 Shows A "Gliding" Movement, Not A "Flick"

Patent No.:   **US 8,095,879 B2**

Fig. 2.
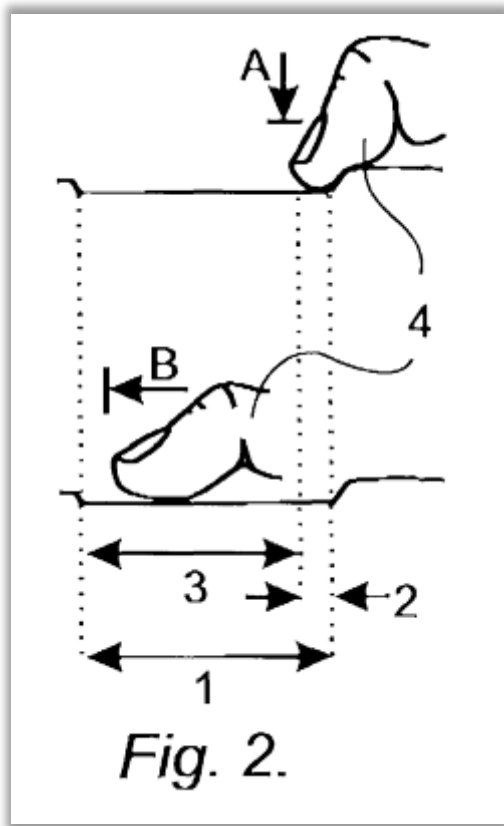
Ex. 2020 [N2-Advertisement-Video] (00:26-00:27)

Petitioner's Depiction Of "Flick" To Resemble "Glide" Is Unsupported By Robertson And Contrary To Plain Meaning

Petitioner's Unsupported Depiction Of Robertson's Flick	Robertson's Flick, Consistent With Plain Meaning (Jerky, Quick, Short Motion)
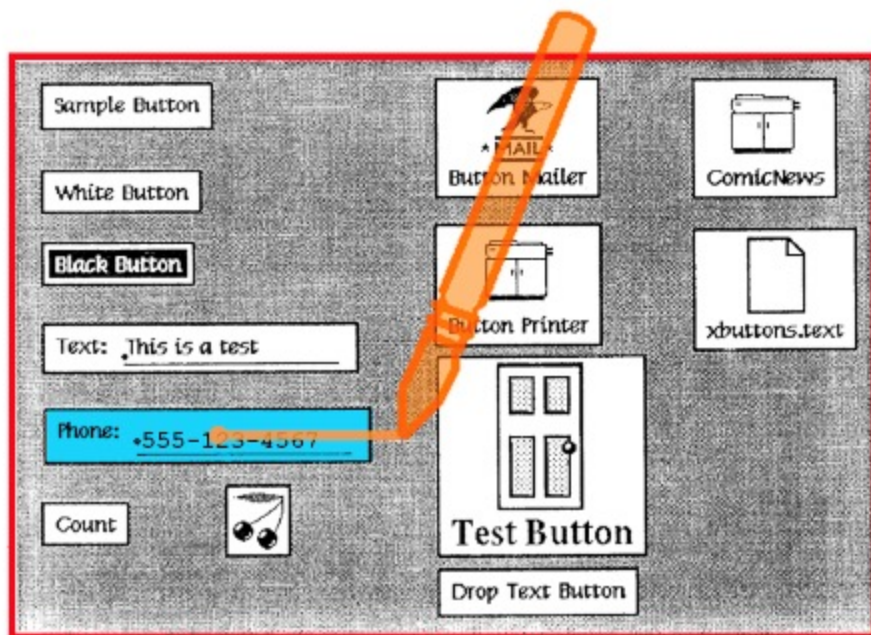
Pet., 26

POR, 41-42

49
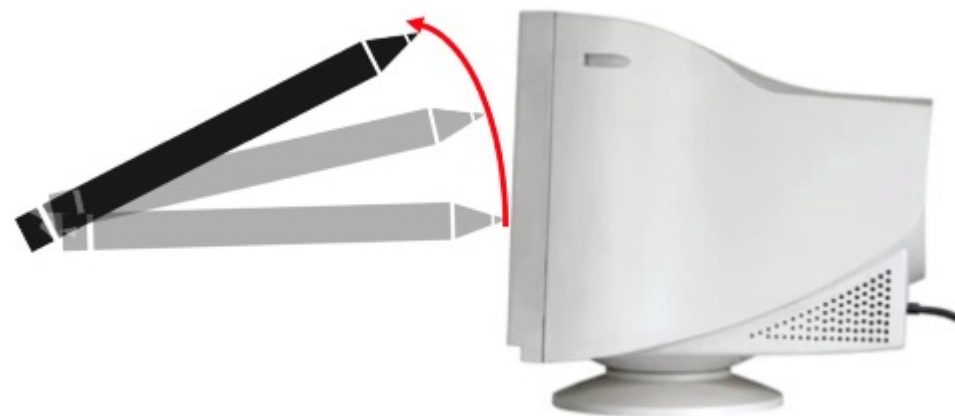
Petitioner's Only Purported Support For Depicting Robertson's "Flick" As A "Glide" Is That A Gesture "Can" Move Outside Of An XButton

Buttons as First Class Objects on an X Desktop

George G. Robertson, D. Austin Henderson, Jr., and Stuart K. Card

Another problem has to do with the way gesture feedback is implemented. Although a gesture must start in an XButton (so that the Server gets the events), it can move outside the XButton. To provide proper feedback,

Ex. 1005 [Robertson] 43

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

❌ No evidence statement relates to a "flick" gesture

❌ Concerns a "problem," not a principle of operation wherein gestures are intended to go outside XButtons

❌ Likely refers to where the gesture initiated at edge of XButton

Ex 2019 [Rosenberg-2nd-Decl.] ¶ 100

Robertson's "Insert" Gesture Fails To Disclose A "Glide" For Similar Reasons As "Flick"; Petitioner Presents No Separate Argument

PETITION

The "xbedit" function to open a button editor is activated by a multi-step operation of touching a pen (or finger) on the phone button, then sliding the pen away from the initial touched location in the shape of a caret to perform an "Insert gesture." Ex-1005, § 3.2; Ex-1003, ¶108. For this multi-step operation, the user

Pet., 26-27

PETITIONERS' REPLY

Neonode's arguments that Robertson's "insert" gesture does not disclose the "gliding ... away" limitation are largely the same as for "flick" (POR 47-50) and fail for the same reasons as explained in Section II.B.2. Neonode's argument

Sur-Reply, 11

Unrebutted: "Insert" And "Glide" Are Distinct In Terms Of Both Mechanical Movement And User Feel

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

100. In terms of either mechanical movement or user feel, and for much of the same reasons as "flick," the "insert" gesture does not resemble a "gliding … away"/swiping gesture. Insert, like "flick," is a jerky movement—in this case two jerky movements connected together. This is apparent by the sharp edge of an insert gesture. If one were to attempt drawing the insert gesture with a pen, while keeping the overall size of the gesture small enough to be interpreted as a gesture on a screen, with a sufficient speed such that a typical device would recognize that as a single gesture, one would experience drawing a first sharp, short line, and then sharply changing direction and drawing a second sharp, short line. Just like flicks, these sharp, jerky lines of an insert are very different from "gliding … away."

Petitioner's Depiction Of Robertson's "Insert" Is Unsupported By Robertson And Inconsistent With Plain Meaning

Petitioner's Incorrect Depiction Of Robertson's Insert
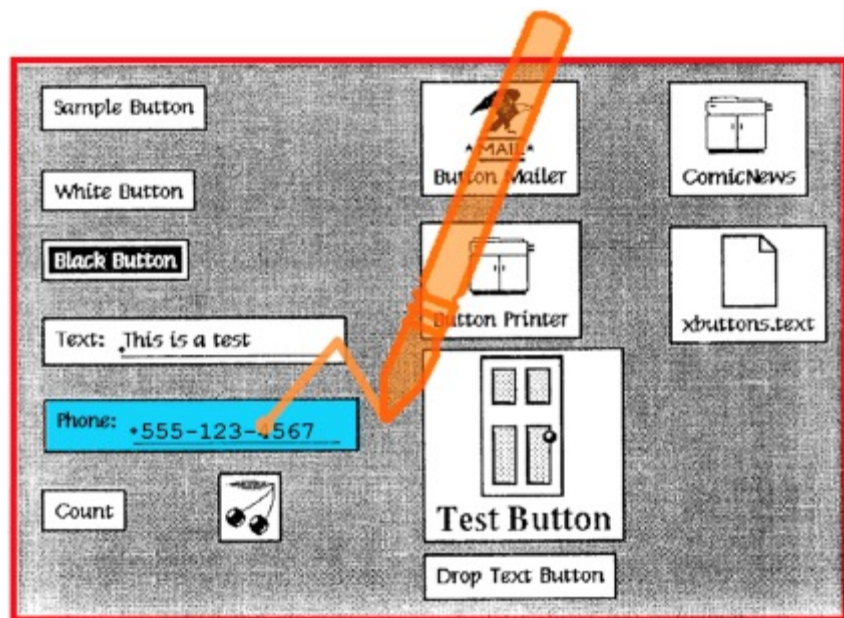
Robertson's Insert, Consistent With Plain Meaning (Jerky, Quick, Short Motion)

Pet., 27
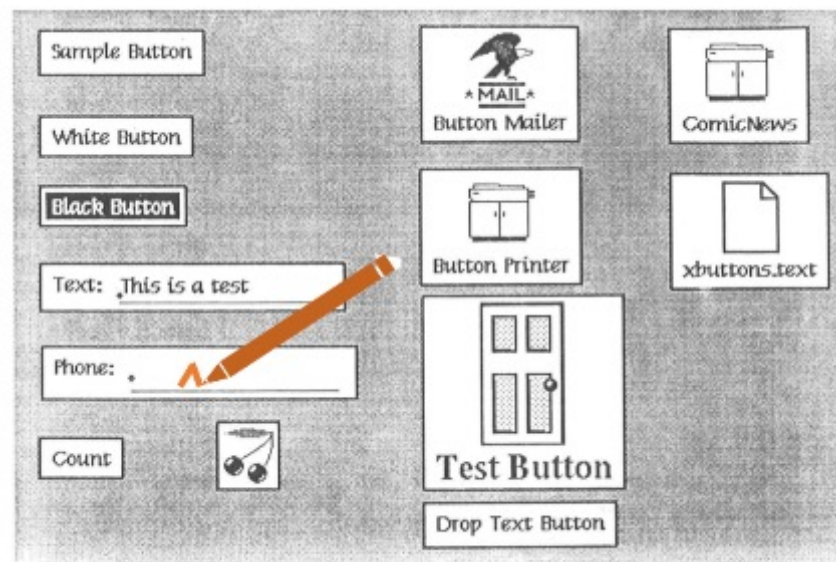
POR, 49-50

An "Editor's Caret" Has A Sharp Angle And Is Usually Smaller Than Text

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1. Secondary Indicia

2. Robertson Grounds:
    i.   "gliding … away" (All Claims)
    ii. **One-Option limitation (All Claims)**
    iii. Computer Program Code "read by a mobile handheld computer unit" (All Claims)
    iv. "a mobile handheld computer unit" (All Claims)
    v.   Robertson Is Not Analogous Art (All Claims)

3. Tarpenning Grounds Fail To Show "gliding … away" (All Claims)

Petitioner Fails To Prove "wherein the representation consists of only one option for activating the function"

Patent No.:   **US 8,095,879 B2**

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

The "one-option" Limitation Was Added During Prosecution To Distinguish From Hirshberg

AMENDMENT AND RESPONSE TO OFFICE ACTION

In order to further distinguish the claimed invention over Hirshberg, applicant has amended claim **1** to include the limitation that the representation of the function consists of only one option for activating the function.

Ex. 1002 [Prosecution-History] 542

In Hirshberg, The Representation Of The Function Provides The Users With Multiple Options On What Action To Take Depending On The Input Gesture

Moving the stylus/finger up towards zone 300 types "H"

Figure 2a
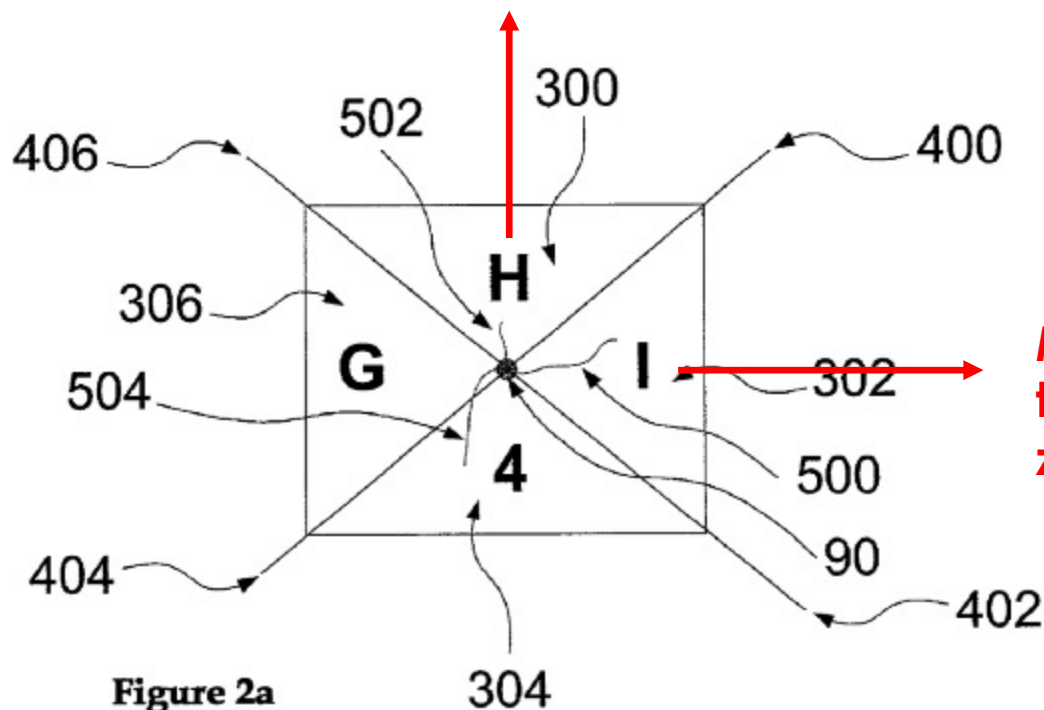
Moving the stylus/finger to the right towards zone 302 types "I"

58

The Applicant Distinguished Hirshberg Because Hirshberg "Teaches Touch And Glide Only For Keys" With Multiple Options

AMENDMENT AND RESPONSE TO OFFICE ACTION

Applicant respectfully submits that Hirshberg teaches a touch and glide operation only for keys that comprise several characters.

On the contrary, for single character keys Hirshberg teaches using a conventional touch operation without a glide (Hirshberg/ pars. [0055] and [0074]). Thus, at par. [0055], Hirshberg recites:

> In the case of one function a regular touch operation activate [sic] the function.

Further, at par. [0074], Hirshberg recites:

> ... a single-function mode wherein a single function is elected on contact with a given key, independent of the direction of motion.

In distinction, the claimed invention uses a multi-step touch-and-glide operation for representations that consist of only one option for activating a function.

Ex. 1002 [Prosecution-History] 541-542

Robertson, Just Like Hirshberg, Provides The Users With Multiple Options On What Action To Take Depending On The Input Gesture

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

107. However, Robertson is just like Hirshberg. Robertson's XButton provides the users with multiple options to choose from for what action to activate, depending on the gesture applied to the XButton: showing the telephone number (click), dialing the telephone number (flick right). Ex. 1005 [Robertson] 40-41. Petitioner's expert does not dispute the relevant aspects of the operation of Robertson. Ex. 2018 [Wobbrock-Depo.] 79:17-22 ("In the example that is shown in Figure 3, there are four distinct gestures that map to four distinct commands."); 78:19-20 (same).

Robertson:

Phone:

Click:	nphone $XB_Text
Check:	
Flick Right:	dialphone $XB_Text

Hirshberg:

Figure 2a
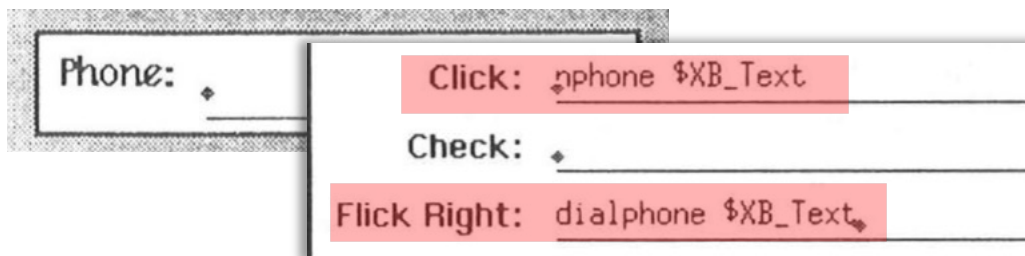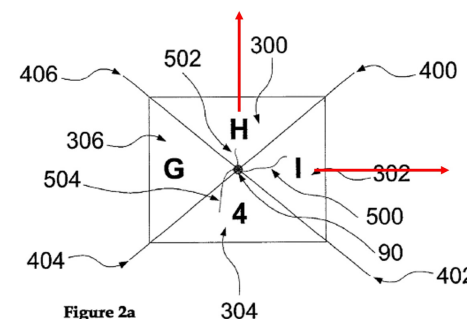
In Relying On Robertson, Petitioner Assumed An Incorrect Interpretation Of The One-Option Limitation

PETITION

Robertson's "Phone" button (blue) activates the "dialphone" function (green) by only a "flick right" gesture (orange): touching the phone button then sliding the pen to the right. Ex-1005, § 3.1; Ex-1003, ¶104. The phone button activates the "xbedit" function (bright green) by only an "Insert gesture [(light orange)]" drawn on the screen. Ex-1005, §§ 3.1-3.2; Ex-1003, ¶104.

Pet., 23

Petitioner implicitly interprets the one-option limitation to mean that each function is activated by only a single gesture

Petitioner's Expert "Did Not Recall" Whether His Review Of Prosecution History "Particularly Focused" On The One-Option Limitation

DEPOSITION OF: DR. JACOB O. WOBBROCK

16   You asked in particular about the phrase in
17   Claim 1 consists of only one option for activating. I
18   don't recall whether my consultation of the prosecution
19   history particularly focused or centered on that given
20   phrase or not.

Petitioner's Second Expert Declaration: No Opinion Relating To The One-Option Limitation

Petitioner Misapprehends Neonode's Argument As Requiring That The Representation Represents "Only One Function"

PETITIONERS' REPLY

Neonode instead wrongly argues that "wherein the representation consists of only one option for activating the function" prohibits the representation from having "multiple options to choose from in terms of *what to activate*"—that is, that the representation represents *only one function*. POR 50, 52-53.

2005) (en banc). Neonode's interpretation also contradicts the specification, which discloses "application dependent function" 21 being different "depending on the current active application," and thus has multiple different functions. Ex-1001, 4:4-5, 4:12-15.

Reply, 13

'879 Specification: A Representation May Represent Multiple Functions At Different Times, But Always Provides One-Option To The User At Any Time

Patent No.:   **US 8,095,879 B2**

4

According to the present invention the menu area **2** is adapted to present a representation of a first **21**, a second **22** and a third **23** predefined function.

5   The first function **21** is a general application dependent function, the second function **22** is a keyboard function, and the third function **23** is a task and file manager.

FIG. **2** shows that any one of these three functions **21**, **22**, **23** can be activated when the touch sensitive area **1** detects a movement of an object **4** with its starting point A within the

10   representation of a function on the menu area **2** and with a direction B from the menu area **2** to the display area **3**.

FIG. **3** shows that if the first function **21** is activated, then the display area **3** is adapted to display icons **211**, **212**, **213**,

15   **214**, **215**, **216** representing services or functions depending on the current active application. One of the icons, in the figure exemplified by icon **211**, always represents a "help"-service, regardless of application. Any key that, because of

Fig. 1.
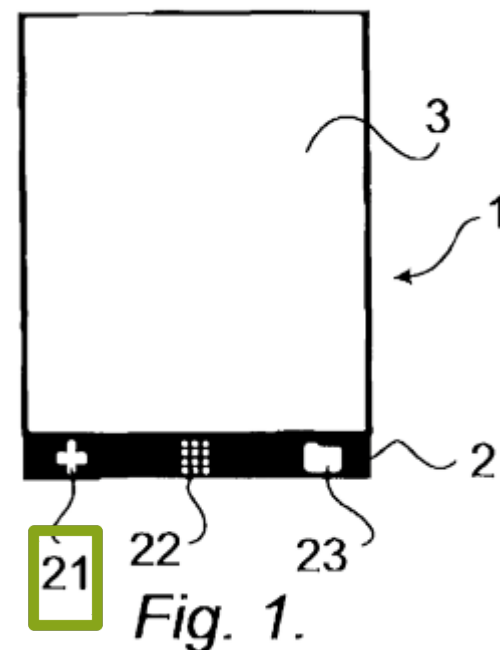
The User Is Provided With Only One Option

Petitioner Incorrectly Argues That Hirshberg Was Distinguished Because It Activated The Same Function By Multiple Gestures

PETITIONERS' REPLY

Neonode's prosecution history arguments regarding Hirshberg are also unavailing. POR 52 (citing Ex-1002, 542). There, the applicant distinguished Hirshberg because it had multiple options—both glide and "conventional touch"—to activate the same function depending on whether the device is in a single- or multi-function mode. Ex-1002, 541-542. The applicant did not distinguish the claims based on multiple functions with a single activation each. *See* Ex-1002, 540-544.[4]

Reply, 14

Petitioner's Argument Is Incorrect: In Both Modes, Hirshberg Activates One-Letter Keys Upon Touch

Hirshberg

[0055]   The activation of the key start by the act of touching in any point in the area on the key. The key contains labels (one or more) to imply the functions associated with the key. The associated function can be entering characters to the display **20** or applying a command function like the send operation in key **108**. The keys in the keypad can be a mix of regular one-function keys like key **108** with other multi function keys. In the case of one function a regular touch operation activate the function. In multi-function key

[0074]   According to a further optional feature of the present invention, the keyboard may be selectively operable in a single-function mode wherein a single function is selected on contact with a given key, independent of the direction of motion. This may be useful, for example, in a calculator mode or telephone dialing mode wherein only numbers are required.

The Reply Changes Its Theory For Claim 1 From Disclosure By Robertson To Obvious To Modify Similar To Claim 17

PETITIONERS' REPLY

Even if claim 1 is limited to representing only one function, the Petition explains that this would have been obvious for claim 17, which the POR does not challenge. Pet. 46-47.

Reply, 14

Petitioner Argued For Claim 17 That A POSITA Would Have Found It Obvious To Associate Only One Function To Each XButton

PETITION

11. [Claim 17] "wherein the location where the representation is provided does not provide touch functionality for a different function."

If Patent Owner argues Robertson does not disclose this claim, a POSITA

would have found it obvious to limit Robertson's button to one function to simplify

the user interface. Ex-1003, ¶163. Robertson allows a user to define gestures and

Pet., 46

Petitioner's New Theory Of Unpatentability For Claim 1 Is Untimely

"Rather than explaining how its original petition was correct, Continental's subsequent arguments amount to an entirely new theory of prima facie obviousness absent from the petition. Shifting arguments in this fashion is foreclosed by statute, our precedent, and Board guidelines."

Wasica Fin. GmbH v. Cont'l Auto. Sys., 853 F.3d 1272, 1286-1287 (Fed. Cir. 2017);
see also Henny Penny Corp. v. Frymaster LLC, 938 F.3d 1324, 1330-1331 (Fed. Cir. 2019)

Wrong On The Merits: Why Would A POSITA Undo A Main Objective Of X-Buttons By Eliminating Multiple Actions?

Buttons as First Class Objects on an X Desktop

George G. Robertson, D. Austin Henderson, Jr., and Stuart K. Card

The following list summarizes the additional goals for XButtons:

- Supports multiple actions,

- Is gesture-based,

- Supports common interaction styles,

- Supports shared buttons,

- Is a high-level toolkit,

- Is window manager independent.

Ex. 1005 [Robertson] 37

No Evidence That Even If A POSITA Were To Undo Robertson's Advantage And Provide A Single Action Per XButton:

The gesture would be a "flick" as opposed to the faster, simpler "tap"

Robertson would have an "accidental activation" problem with the standard "tap" activation

"Flick" was known to address accidental activation problems

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   iii. **Computer Program Code "read by a mobile handheld computer unit" (All Claims)**
   iv. "a mobile handheld computer unit" (All Claims)
   v. Robertson Is Not Analogous Art (All Claims)

3. Tarpenning Grounds Fail To Show "gliding ... away" (All Claims)

The Processor Executing The Code To Display The Claimed Steps Must Be On The Same Handheld Unit Displaying The Interface

Patent No.:   **US 8,095,879 B2**

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

   a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

The Preamble Provides Antecedent Basis For The "Mobile Handheld Computer Unit" And The "User Interface"

7

4. The computer readable medium of claim **1**, wherein the function, when activated, causes the user interface to display a keyboard and a text field.

5. The computer readable medium of claim **4**, wherein said text field is used for inputting and editing of text through said keyboard.

6. The computer readable medium of claim **1**, wherein the function, when activated, causes the user interface to display a list with a library of available applications and files on the mobile handheld computer unit.

7. The computer readable medium of claim **6**, wherein the user interface is characterised in, that a selection of an application or file is done by gliding the object along said touch sensitive area so that a representation of a desired one of said application or file is highlighted, raising said object from said touch sensitive area, and then tapping on said touch sensitive area.

8. The computer readable medium of claim **7**, wherein the user interface is characterised in, that at any given time said list presents only files or only applications, and that an area of said list presents a field through which said list can be changed from presenting files to presenting applications, or from presenting applications to presenting files.

9. The computer readable medium of claim **7**, wherein the user interface is characterised in, that, one item in said list is highlighted by a moveable marking, and the user interface enables list navigation whereby gliding the object along the touch sensitive area in a direction towards the top of said list or towards the bottom of said list causes said marking to move in the same direction without scrolling the list.

10. The computer readable medium of claim **9**, wherein the user interface is characterised in, that, if the number of applications or files in said list exceeds the number of applications or files that can be presented on said touch sensitive area as content, and if the object is (i) glided along said touch sensi-

8

tive area to the top or bottom of said touch sensitive area, then (ii) raised above said touch sensitive area, then (iii) replaced on said touch sensitive area, and then (iv) again glided along said touch sensitive area to the top or bottom of said touch sensitive area, said list navigation pages the content of said list up or down by one whole page.

11. The computer readable medium of claim **10**, wherein the user interface is characterised in, that if the object is raised from any first position on said touch sensitive area and then replaced on any second position on said touch sensitive area, said list navigation can be continued from said second position.

12. The computer readable medium of claim **1**, wherein the user interface is characterised in, that an active application, function, service or setting is advanced one step by gliding the object along the touch sensitive area from left to right, and that the active application, function, service or setting is closed or backed one step by gliding the object along the touch sensitive area from right to left.

13. The computer readable medium of claim **1**, wherein the user interface is characterised in, that said representation of said function is located at the bottom of said touch sensitive area.

14. The computer readable medium of claim **1**, wherein the touch sensitive area is 2-3 inches in diagonal dimension.

15. The computer readable medium of claim **1**, characterised in, that said computer program code is adapted to function as a shell upon an operating system.

16. The computer readable medium of claim **1**, wherein the representation is finger-sized.

17. The computer readable medium of claim **1**, wherein the location where the representation is provided does not provide touch functionality for a different function.

*   *   *   *   *

A "Mobile Handheld Computer Unit" Is A Defining Aspect Of The Invention

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

113. The claims, the specification and prosecution history all confirm that a "mobile handheld computer unit" is a defining aspect of the invention. As I explained in connection with the "field of endeavor" of the '879, the title, abstract and field of invention of the '879 all expressly recite a "user interface for a mobile handheld computer unit." *See* ¶¶ 54-59, *supra*. The Patent further explains that it seeks to address the problem of "providing a user interface that is suitable for small handheld computer units," and then continues to provide a solution "with the starting point from a user interface for a mobile handheld computer unit." *Id.*, 1:41-42, 1:49-61, 1:65-66. All embodiments of the Patent relate to a user interface which "is specifically adapted to be used with a small computer unit where the size of the touch sensitive area is in the order of 2-3 inches." *Id.*, 3:1-3; *see also id.*, 3:10-15; 3:50-51, 6:4-6; Figs. 1, 11, 12, 13, 14. Similarly, the Applicant during prosecution repeatedly emphasized that the invention is designed to be operated with one hand, *i.e.*, is a handheld mobile computer unit. *Id.*, 301; *see also id.*, 339-340 (same). Therefore, a POSITA would readily recognize that "a mobile handheld computer unit" is a necessary and defining aspect of the '879 Patent's invention.

Petitioner Presents No Analysis Or Evidence To Challenge Neonode's Showing That The Preamble Is Limiting

Relying On The Motivation Of Providing A "Unitary" System, The Petition Alleged That It Was "Obvious" To Implement Robertson To Disclose This Limitation

PETITION

A POSITA would have found it obvious to store Robertson's user interface computer program code in a non-transitory computer readable medium of the laptop, PDA, or other handheld computing device to provide a unitary system.

Ex-1003, ¶86.

Pet., 14

DECLARATION OF JACOB O. WOBBROCK, PH.D.

86.   One skilled in the art would have found it obvious to store Robertson's user interface computer program code in a non-transitory computer readable medium of the laptop, PDA, or other handheld computing device to keep the program code being executed in the same device as the device executing it to provide a unitary system. That is, one skilled in the art would have placed both the

Ex. 1003 [Wobbrock-Decl.] ¶86

Robertson Is An X-Window Operating System, Which Is Integral To Its Purpose Of Designing XButtons

Buttons as First Class Objects on an X Desktop

George G. Robertson, D. Austin Henderson, Jr., and Stuart K. Card

Abstract

A high-level user interface toolkit, called *XButtons*, has been developed to support on-screen buttons as first class objects on an X window system desktop. With

XButtons breaks free of this dependence on an embedding application by providing buttons as first class objects on the X desktop.

The X-Window System Is Designed For "Network Transparency" (*i.e.*, A Distributed System), Not A "Unitary" Environment

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

131.   The X window system (also referred to as just "X" or "X11") is a network-transparent windowing system. That means that it allows the system to "de-couple" the display of the user interface from the processor and the application that provides the information to be displayed. A typical use case for the X window system is where there is a high power computer ("main frame") located centrally in a network, and then there are numerous "thin" clients scattered around the network at user locations. The "thin" clients have very limited processing capabilities of their own, but are a monitor, keyboard, and mouse that send the user input information to the remote, centrally located computer for processing, and then display the results back to the user once received from the central computer. The X window system

Petitioner's X-Window Reference Confirms: X-Window Is Designed For "Network Transparency"

X WINDOW SYSTEM

ROBERT W. SCHEIFLER & JAMES GETTYS

With Jim Flowers & David Rosenthal   THIRD EDITION

The Complete
Reference to
Xlib
X Protocol
ICCCM
XLFD

X Version 11
Release 5

The X Window System, or X, is a network-transparent window system. With X, multiple applications can run simultaneously in windows, generating text and graphics in monochrome or color on a bitmap display. Network transparency means that application programs can run on machines scattered throughout the network. Because X permits applications to be device-independent, applications need not be rewritten, recompiled, or even relinked to work with new display hardware.

Ex. 1027 [X-Window-System] 33

The Distributed Nature Of X-Window Is By Design To Achieve Specific Benefits

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

back to the user once received from the central computer. The X window system provides multiple benefits. First, it allows a large system to save resources by providing only one central processor (e.g., a mainframe) for use by all the users, with each user station having only a thin client device. Second, it allows the users to work collaboratively on the same applications and datasheets and see the same results from the central processor. This is also confirmed by the book on X window systems submitted by Dr. Wobbrock, Ex. 1027 [X-Window-System] 33.

Robertson, Like Conventional X-Window Systems, De-Couples The Display From The Processor That Executes Its Code

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

133. Robertson further confirms the above, by explaining that its display is not on the same device executing the XButton code. Robertson uses the same traditional, de-coupled X window client-server environment. In Robertson, the remotely executing application determines the user interface, including whether XButtons are used, as well as the details of those XButtons, displayed on the user's display. Ex. 1005 [Robertson] 42.

Petitioner Presents No Analysis Why A POSITA Would Undo X-Windows Principle Of Operation To Provide A "Unitary System"

Netflix Inc. v. DivX, LLC, IPR2020-00052, Paper 82, 39 (PTAB Apr. 22, 2021) (rejecting combination that would "***chang[e] the basic principle of Vehvilaïnen's operation, consequently dissuading the combination with Kadono***.")

In re Ratti, 270 F.2d 810, 813 (CCPA 1959) (proposed combination is improper where it would change basic principles of operation of one of the references)

Plas-Pak Indus., Inc. v. Sulzer Mixpac AG, 600 F. App'x. 755, 759 (Fed. Cir. 2015) ("Such ***a change in a reference's "principle of operation" is unlikely to motivate a person of ordinary skill to pursue a combination with that reference***.")

Reply Belatedly And Improperly Attempts To Change The Petition's Obviousness Theory For Claim 1

Petition: "Obvious" To Implement Robertson To Disclose Limitation	Reply: The Petition Argued Robertson Inherently Discloses The Limitation
"***A POSITA would have found it obvious to store Robertson's user interface computer program code in*** a non-transitory computer readable medium of ***the laptop, PDA, or other handheld computing device*** to provide a unitary system."	"Neonode is wrong that Petitioner did not argue that Robertson teaches computer program code being read by a mobile handheld computer unit. POR 62-65. The Petition explains that a ***POSITA would have understood Robertson's interface code would be stored on the device or the device would not function.***"
Pet., 14	Reply, 18

That Robertson "Would Not Function" Unless The Same Device Executes Code And Presents User Interface Is Refuted By X-Window System

X WINDOW SYSTEM

ROBERT W. SCHEIFLER & JAMES GETTYS

With Jim Flowers & David Rosenthal   THIRD EDITION

The Complete
Reference to
Xlib
X Protocol
ICCCM
XLFD

X Version 11
Release 5

The X Window System, or X, is a network-transparent window system. With X, multiple applications can run simultaneously in windows, generating text and graphics in monochrome or color on a bitmap display. Network transparency means that application programs can run on machines scattered throughout the network. Because X permits applications to be device-independent, applications need not be rewritten, recompiled, or even relinked to work with new display hardware.

Ex. 1027 [X-Window-System] 33

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    iii. Computer Program Code "read by a mobile handheld computer unit" (All Claims)

    iv. "a mobile handheld computer unit" (All Claims)

    v.   Robertson Is Not Analogous Art (All Claims)

3. Tarpenning Grounds Fail To Show "gliding … away" (All Claims)

The Claims Require "a mobile handheld computer unit"

Patent No.:   **US 8,095,879 B2**

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

Petitioner Relies On Robertson, Or Alternatively, Robertson And Madallozzo For "a mobile handheld computer unit"

PETITION

Robertson discloses or suggests [1Preamble]. Ex-1003, ¶¶80-89.

Maddalozzo discloses and renders obvious the computer unit being a "mobile handheld computer unit" and the computer program being stored in a "non-transitory computer readable medium." Ex-1003, ¶80.

Pet., 12

Undisputed: Robertson Does Not Disclose "a mobile handheld computer unit"

DECLARATION OF JACOB O. WOBBROCK, PH.D.

87.   Robertson discloses a computer unit for presenting its user interface

for "pen-based gestural input[s]," but does not specify the type of computer unit.

Ex. 1003 [Wobbrock-Decl.] ¶87

Robertson (1991) Is Designed For A Client-Server Network Of Desktop Computers In A Research Setting Of The Early 90s

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

60.   Unlike the '879, Robertson is not directed at a user interface for handheld mobile devices. Instead, Robertson's system is designed for a client-server network of desktop computers in a setting such as a research laboratory, where collaborating users are sophisticated programmers who design XButtons and even share their designed XButtons together. *See also* ¶¶ 130-131, *infra* (discussion of X window system).

Robertson's Use Of "mouse or pen" As An Input Device Does Not Mean It Is a "mobile handheld computer unit"

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

While Robertson does mention that "XButtons support mouse-based or pen-based gestural input in addition to simple 'pressing,'" Ex. 1005 [Robertson] 39, this simply indicates that pen-based input may also be used in Robertson's desktop system instead of a mouse. In fact, Robertson clearly states that its gesture is input by "mouse or pen." *Id.* 39 ("XButtons have multiple actions, which are selected by simple mouse or pen gestures."); *id.* ("Whenever a user gestures at an XButton, a gesture parser interprets mouse or pen movement and classifies it *as* one of a small set of easily differentiated gestures (flick left, flick right, flick up, flick down, click, rubout, check, or insert)."

Robertson's Disclosure Of Generic Programming Languages Does Not Mean That It Is Designed For "a mobile handheld computer unit"

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

handheld computer unit." Pet., 13. But the choice of programming language between Unix commands via the Unix shell and, for example, Lisp, says nothing about Robertson's expressly disclosed desktop system being a mobile handheld computer unit. These programming languages are not exclusively, or even likely, implemented on a mobile handheld computer unit.

Reply: The Combination Uses Maddalozzo As A Prop For A Blackbox, Unspecified Device To Implement Robertson's "Interface"

PETITIONER'S REPLY

Cir. 2016). Neonode does not address the Petition's combination, which does not rely on Maddalozzo's *interface*, but rather Maddalozzo's disclosure of mobile computers running the same Unix and X-based systems, on which Robertson's interface would have been implemented. Pet. 14-19. Because Robertson's gesture-activated interface improves any touchscreen-activated devices, like laptops and PDAs, a POSITA would have found it obvious as a matter of law to improve the same and similar devices in the same way. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007).
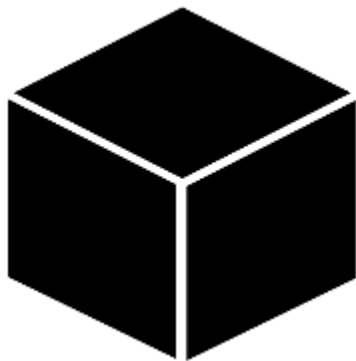
The Petition: Implement Robertson's XButtons And Gestures, Not Generic "Interface"

PETITION

A POSITA would have found it obvious to implement Robertson's

XButtons (or other gesture-activated buttons) in mobile handheld computer units to

enhance the user experience through more capable buttons supporting gesture

activations. Ex-1003, ¶89. POSITAs knew handheld computers could run X

Pet., 15

A POSITA would have been motivated to implement Robertson's gesture-

based operations in mobile handheld computer units (e.g., laptop, PDA-type

device) having non-transitory computer readable media to provide a fully

Pet., 16

POPR: Without Specificity On The Mobile Unit's Interface, It Is Impossible To Opine On Motivation To Implement XButtons In It

Dr. Rosenberg's First Declaration

no information about this hypothesized device. Dr. Wobbrock does not explain or describe the structure or workings of his modified "mobile handheld computer unit," other than by reference to its "mobile handheld" nature. This leaves numerous material aspects of this hypothetical device undefined. For instance, what functions are activatable from the display? How is the display arranged, and where are the activatable "representations" located? What types of "representations" are presented on the display – are they icons? Sliders? Do the "representations" contain text fields like Robertson's "Phone" button? How large is the display, and are the representations on the display densely packed or spaced apart? These are material issues for motivation, but Dr. Wobbrock does not provide any guidance whatsoever. Without the clarity that such an effort would bring, there is no basis on which Dr. Wobbrock may credibly opine that a POSA would have been motivated to create his hypothetical device.
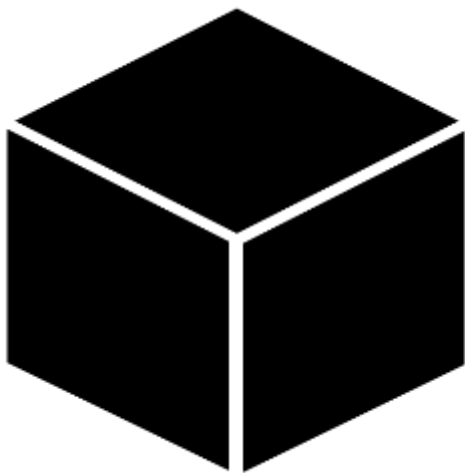
I.D.: The Combination Implements Robertson's XButton's "In Maddalozzo's Mobile Handheld Devices" With Their User Interface

DECISION
Granting Institution of *Inter Partes* Review

Patent Owner contends that "Petitioner uses Maddalozzo as a prop for a different combination: Robertson and some undefined 'mobile handheld computer unit'" and so Petitioner fails to clearly articulate its proposed combination and how it would operate. Prelim. Resp. 26–27. *But Patent Owner appears to misunderstand Petitioner's asserted ground*. … *Petitioner relies Maddalozzo as disclosing a mobile handheld device (e.g., laptop or PDA) with a touch-based user interface* and argues that an ordinarily skilled artisan would have *implemented Robertson's code and XButtons on such a mobile handheld device.* … As to Petitioner's assertion that *an ordinarily skilled artisan would have used Robertson's XButtons in Maddalozzo's mobile handheld devices* to enhance user experience through more capable buttons, ….

None Of Petitioner's Purported *Motivations* To Use Robertson's XButtons Have Any Application To Madallozzo's Mobile Device

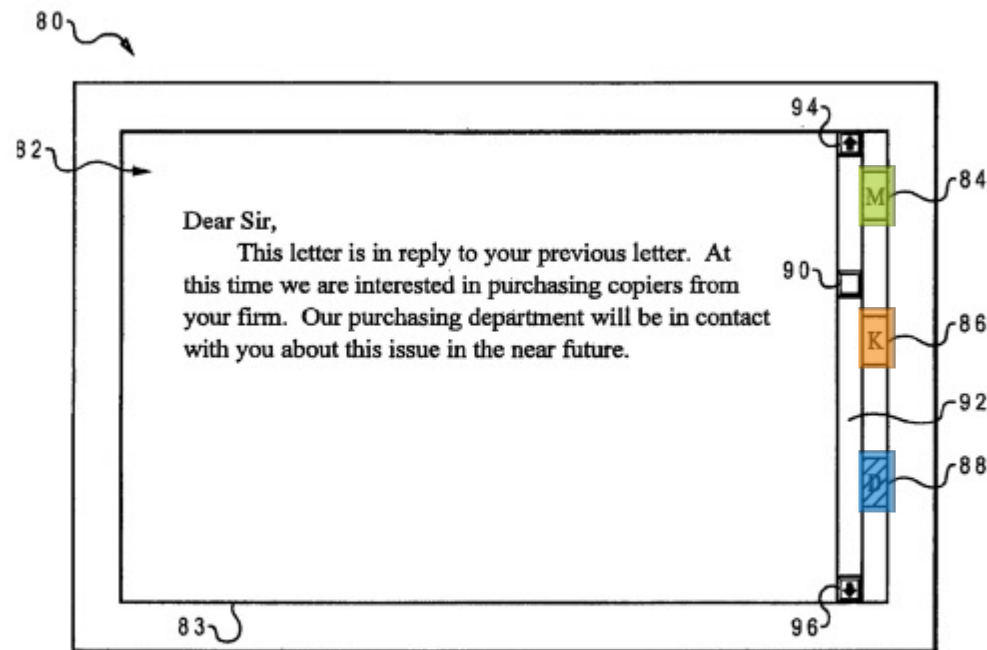# Madallozzo's Device Utilizes A Simple User Interface With Three Keys

Fig. 4

M-Key (mouse mode) presents a cursor

K-Key (keyboard mode) presents a keyboard

D-Key (display mode) takes device to normal display mode

Madallozzo Already Provides "A Small Form Factor With A Convenient User Interface"

PETITION

"Touch screen technology [was] increasingly being implemented … with portable computers," and the "increasingly portable" nature of such devices would have motivated a POSITA to implement Robertson's gesture-based function activation to keep the form factor small, while still allowing for convenient user interfaces. Ex-1006, 1:28-33; Ex-1003, ¶¶91-93.

Pet., 16

Dear Sir,
This letter is in reply to your previous letter. At this time we are interested in purchasing copiers from your firm. Our purchasing department will be in contact with you about this issue in the near future.
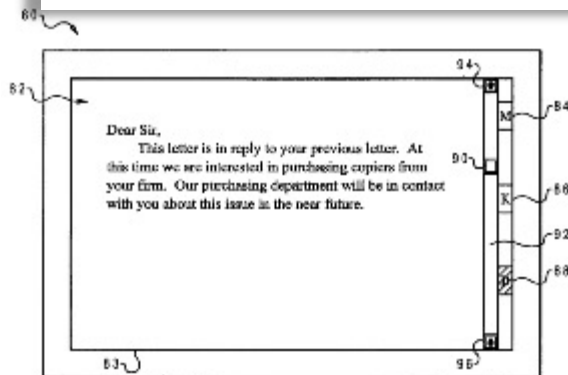
Fig. 4

What Is The Benefit Of Petitioner's Combination For Madallozzo's Device?

Madallozzo Already Operates Without A Mouse Or A Keyboard

PETITION

operate on smaller screens. Ex-1003, ¶93; Ex-1005, § 3.1. A POSITA would have

been motivated to implement gesture-based interfaces on mobile computing

devices because consumers desired portability and gestures were more convenient

for such devices, often lacking external mice and keyboards. Ex-1006, 1:28-60;

Ex-1003, ¶91.

Pet., 17

Dear Sir,
      This letter is in reply to your previous letter. At
this time we are interested in purchasing copiers from
your firm. Our purchasing department will be in contact
with you about this issue in the near future.

Fig. 4

What Is The Benefit Of Petitioner's Combination For Madallozzo's Device?
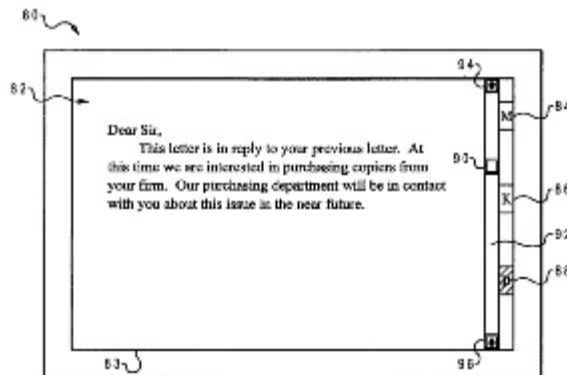
Petitioner Fails To Prove How Robertson's Multi-Action XButtons Are "Simple[r]" Or "More Convenient" Than Madallozzo's Existing System

Robertson's Button Editor With At Least Eight Gestures

Petitioner Fails To Show Any Reason Why A POSITA Would Have Implemented XButtons In Madallozzo's Device

"***Because each device independently operates effectively***, a person having ordinary skill in the art, ***who was merely seeking to create a better device*** to drain fluids from a wound, ***would have no reason to combine*** the features of both devices into a single device. ."

Kinetic Concepts, Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1369 (Fed. Cir. 2012)

"At the very least, ***Petitioner has not adequately supported its "good idea" rationale*** for storing recovery information in the main memory database."

Hulu LLC v. Sound View Innovations, IPR2018-00582, Paper 34, 20-21 (PTAB Aug. 5, 2019) (informative)

Even If XButtons Were Somehow "Better," That Is Not Sufficient Motivation To Combine

Rejecting as insufficient motivation that "you **wanted to build something better**. You wanted a system that was **more efficient, cheaper**, or you wanted a system that **had more features**, makes it more attractive to your customers, because by combining these two things you could do something new that hadn't been able to do before."

ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc., 694 F.3d 1312, 1328 (Fed. Cir. 2012)

"[S]tatements of **increased utility and minimal modifications are generic, and fail to provide necessary factual support**—they are akin to stating in a conclusory fashion that the combination 'would have been obvious.'"

Samsung Austin Semiconductor, LLC v. Red Rock Analytics, LLC, IPR2018-00556, Paper 18, 21 (Aug. 20, 2018)

Reply And Dr. Wobbrock's Second Declaration Did Not Respond To Showing Of No Motivation To Implement XButtons In Madallozzo's Device

Table Of Contents

1. Secondary Indicia

2. Robertson Grounds:

    i.   "gliding … away" (All Claims)

    ii. One-Option limitation (All Claims)

    iii. Computer Program Code "read by a mobile handheld computer unit" (All Claims)

    iv. "a mobile handheld computer unit" (All Claims)

    v.   **Robertson Is Not Analogous Art (All Claims)**

3. Tarpenning Grounds Fail To Show "gliding … away" (All Claims)

Only Analogous Art Qualifies As Prior Art

- "A reference **qualifies as prior art** for an obviousness determination under § 103 **only when it is analogous** to the claimed invention."

  In re Klein, 647 F.3d 1343, 1348 (Fed. Cir. 2011)

- "Non-analogous art is **too remote to constitute prior art**."

  Penda Corp. v. United States, 29 Fed. Cl. 533, 557-58 (Fed. Cl. 1993)

- "An assessment of whether relied-upon art is analogous is a **threshold inquiry** ..."

  Victoria's Secret v. Andra Group, IPR2020-00853, Paper 14, 3 (PTAB Dec. 11, 2020)

- "The **threshold issue** is whether [the reference] is analogous art..."

  Kingston v. Polaris, IPR2020- 00853, Paper 14, 3 (PTAB Dec. 11, 2020)

Undisputed: Petitioner Has Burden Of Proving Robertson Is Analogous Art

"**Petitioner bears the burden** of showing by a preponderance of evidence that the asserted prior art references are analogous art … "

Schott Gemtron Corp. v. SSW Holding Co., Inc.
IPR2013-00358, Paper 106, 26 (PTAB Aug. 20, 2014)

The Board routinely denies institution where a petition fails to demonstrate reference is analogous (POR, 18-19, collecting cases)

The Petition Fails As A Matter Of Law Because It Provided No Analysis Regarding Analogous Art

- **No** mention of "analogous art," "field of endeavor" or "problem" in Petition

- **No** analysis in Petition

- **No** analysis in Dr. Wobbrock's first declaration

Petitioner Attempts For The First Time To Show Robertson Is Analogous Art In Its Reply

Two Analogous Art Tests

"**Two separate tests** define the scope of analogous prior art: **(1)** whether the art is **from the same field of endeavor**, regardless of the problem addressed and, **(2)** if the reference is not within the field of the inventor's endeavor, whether the reference still is **reasonably pertinent to the particular problem with which the inventor is involved**."

In re Bigio,
381 F.3d 1320, 1325 (Fed. Cir. 2004)

In re Clay: Field Of Endeavor Test Is Strictly Applied

"**Clay's field of endeavor is the storage of refined liquid hydrocarbons. The field of endeavor of Sydansk's invention, on the other hand, is the extraction of crude petroleum. The Board clearly erred** in considering Sydansk to be within the same field of endeavor as Clay's."

In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992)

Reference's field: oil extraction

Clay's field: oil storage

Crude Oil

NOT ANALOGOUS

Clay is <u>the</u> leading analogous art case, cited 33x by CAFC, 18x since *KSR*

Wang: Field Of Endeavor Test Is Strictly Applied

"The Allen-Bradley art is **not in the same field of endeavor** as the claimed subject matter **merely because it relates to memories. It involves memory circuits in which modules of varying sizes may be added or replaced; in contrast, the subject patents teach compact modular memories.**"

Wang Labs., 993 F.2d 858, 864 (Fed. Cir. 1993)

Robertson And The '879 Patent Do Not Share The Same Field Of Endeavor

Robertson's Field	The '879 Patent's Field
User interface for X-Window Desktops	User interfaces for mobile handheld computer units

'879 Patent's Title And "Technical Field" Demonstrate Its Field Of Endeavor

Patent No.: **US 8,095,879 B2**

(54) **USER INTERFACE FOR MOBILE HANDHELD COMPUTER UNIT**

TECHNICAL FIELD

The present invention relates to a user interface for a mobile handheld computer unit, which computer unit comprises a touch sensitive area, and which touch sensitive area is divided into a menu area and a display area.

Ex. 1001 ['879 Patent] 1:6-9

The '879 Patent's "Solution" Takes As A Starting Point "A Mobile Handheld Computer Unit"

Patent No.: **US 8,095,879 B2**

Solution

Taking these problems into consideration, and with the staring point from a user interface for a mobile handheld computer unit, which computer unit comprises a touch sen-

Ex. 1001 ['879 Patent] 1:65-67

The user interface of the present invention is specifically adapted to be used with a small computer unit where the size of the touch sensitive area is in the order of 2-3 inches, The user interface is also adapted to be operated by one hand, where the object can be a finger, such as the thumb, of a user of the computer unit.

Ex. 1001 ['879 Patent] 3:1-6

Robertson Is Directed At A Client-Server Network Of Desktop Computers

Buttons as First Class Objects on an X Desktop

George G. Robertson, D. Austin Henderson, Jr., and Stuart K. Card

4.1   XButtons Server

Communication with the XButtons Server is done following standard X inter-client communications protocols; the Server creates an unmapped window (the XB-Root window) that is used for sending commands to the Server and getting responses from the Server. Server command requests are appended to the *XBCommand* property of the XBRoot window, and responses are appended to a reply property of the XBRoot window generated by the requesting process.

Ex. 1005 [Robertson] 42

Robertson Is Directed At Sophisticated Programmers And Researchers Who Design And Share XButtons

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

60.   Unlike the '879, Robertson is not directed at a user interface for handheld mobile devices. Instead, Robertson's system is designed for a client-server network of desktop computers in a setting such as a research laboratory, where collaborating users are sophisticated programmers who design XButtons and even share their designed XButtons together. *See also* ¶¶ 130-131, *infra* (discussion of X window system).

Robertson's Purpose Is Relevant To Determining Whether Robertson Is "Reasonably Pertinent"

"Thus, **the purposes of both the invention and the prior art are important** in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve. **If a reference disclosure has the same purpose as the claimed invention**, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection. …. **If it is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.**"

In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992)

Robertson Addresses The Problem Of Creating Stand-Alone ("First Class") User Tailorable Buttons In X-Window Desktop

Buttons as First Class Objects on an X Desktop

George G. Robertson, D. Austin Henderson, Jr., and Stuart K. Card

Physical buttons have been around since the first electrical devices were built. They are so common that we never think about them; push a button and some action will take place. On-screen buttons in one form or another have been around since the mid-1960's. Their appeal as a human computer interaction technique is obvious; arbitrary actions can be invoked by a simple interaction with a display object that looks pressable, and the style of interaction is familiar to everyone. It is no surprise that many computer systems use on-screen buttons as part of their interface. On the other hand, very few systems provide buttons that stand on their own ("first class objects") or that allow an end-user to create and adapt buttons for their own needs. This kind of user tailorable button is what this paper focuses on.

Ex. 1005 [Robertson] 35

The '879 Patent Is Directed At The Problem Of A User Interface For Mobile Handheld Computer Units That Is:

Patent No.:   **US 8,095,879 B2**

Technical Problems

(1) It is a problem to provide a user-friendly interface that is adapted to handle a large amount of information and different kinds of traditional computer-related applications on a small handheld computer unit.

(2) It is a problem to provide a user interface that is simple to use, even for inexperienced users of computers or handheld devices.

(3) It is a problem to provide a small handheld computer unit with an easily accessible text input function.

(4) It is also a problem to provide a simple way to make the most commonly used functions for navigation and management available in the environment of a small handheld computer unit.

Ex. 1001 ['879 Patent] 1:47-61

Robertson And The '879 Patent Are Directed Towards Solving Entirely Different Problems

Robertson's Problem	The '879 Patent's Problem
Creating stand-alone ("First Class") user tailorable buttons in X-Window desktop	A user interface for mobile handheld computer units that can handle a large amount of information, is simple to use even for inexperienced users, has easily accessible text input function, provides a simple way to make most commonly used functions available

Dispositive: Petitioner Never Identified, Or Challenged Neonode's Identification Of, The Problems With Which Robertson Was Involved

"when addressing whether a reference is analogous art with respect to a claimed invention under a reasonable-pertinence theory, *the problems to which both relate must be identified and compared*."

Donner Tech. LLC v. Pro Stage Gear, LLC,
970 F.3d 1353, 1359 (Fed. Cir. 2020)

Reply's Reliance On Robertson's Reference To "Simple," "Familiar" Interactions In The Context Of Entirely Different Problems And Systems Is Unavailing

- "**Clearly erroneous**" to find one patent **directed towards a gel utilized in the extraction of petroleum was analogous to another patent directed towards a gel utilized in the storage of that same petroleum** even though **both patents were owned by the same company**." *In re Clay*, 966 F.2d 656, 657-60 (Fed. Cir. 1992)

- **Memory modules used for industrial purposes not reasonably pertinent to patent relating to memory modules used for personal computers.** *Wang Labs,* 993 F.2d at 864

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    iii. Computer Program Code "read by a mobile handheld computer unit" (All Claims)

    iv.   "a mobile handheld computer unit" (All Claims)

    v.   Robertson Is Not Analogous Art (All Claims)

3. **Tarpenning Grounds Fail To Show "gliding … away" (All Claims)**

Tarpenning Grounds: Single-Reference Obviousness Based On Substituting Tarpenning's Touch Activation With "gliding … away"

PETITION

2.   Claim 1

Tarpenning renders obvious claim 1.

Pet., 67

A POSITA would have found it obvious to replace Tarpenning's touch operation to activate the menu display functions of book menu key 84 and library menu 86 with the disclosed multi-step touch-then-glide activation gesture.

Ex-1003, ¶217.

Pet., 80

Institution Decision: The Petition Failed To Present Sufficient Motivation To Modify Tarpenning As Proposed

DECISION
Granting Institution of *Inter Partes* Review

"We have doubt that Petitioner's proffered reasons would have prompted an ordinarily skilled artisan to modify Tarpenning's book and library menu keys for activation by touch then glide. … Considering the benefits and drawbacks of the modification, *we have doubt that Petitioner shows sufficiently that an ordinarily skilled artisan would have had reason to modify Tarpenning* to arrive at claim 1 as Petitioner asserts."

Paper 19 [Institution Decision] 41-42

Petition: A POSITA Would Have Modified Tarpenning Keys 84, 86 To Be Activated By "gliding … away" instead of touch

PETITION

A POSITA would have found it obvious to replace Tarpenning's touch operation to activate the menu display functions of book menu key 84 and library menu 86 with the disclosed multi-step touch-then-glide activation gesture.
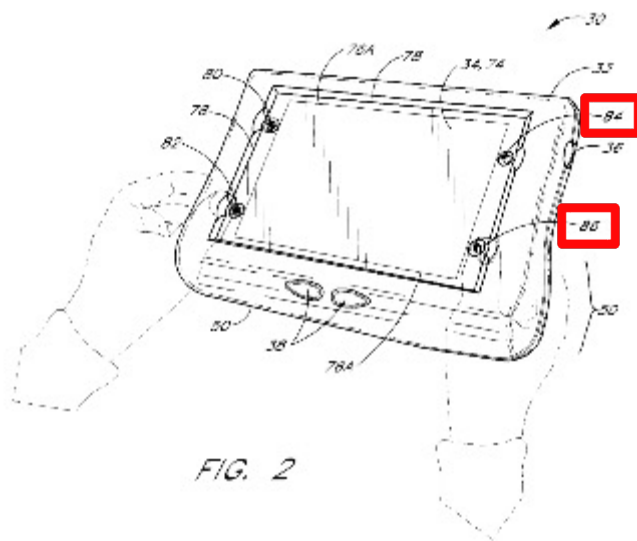
Ex-1003, ¶217.

Pet., 80

FIG. 2
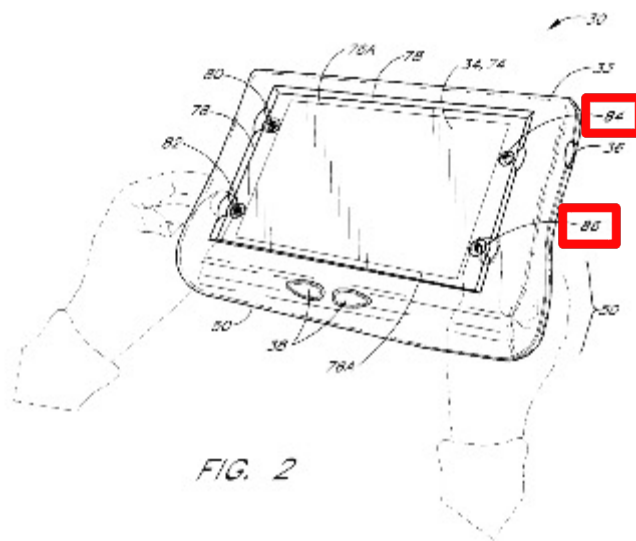
Tarpenning: Menu Keys 84, 86 Are Activated By Pressing Them, Not "gliding … away"

United States Patent
Tarpenning et al.

When the user presses the book menu key **84** or the library menu key **86**, the device **30** displays a book menu **85** (FIG. **6**) or a library menu (not shown), respectively. The book
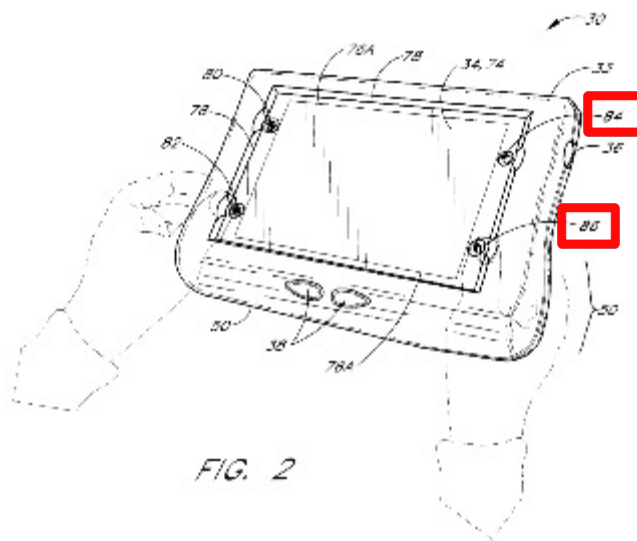
Ex. 1009 [Tarpenning] 6:41-43

FIG. 2

The Concept Of Activation By "gliding ... away" Is Entirely Absent From Tarpenning

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

137. "Gliding ... away" is entirely absent from Tarpenning. Nor does Tarpenning use any of the terms glide, gliding, swipe, swiping or any similar word.

FIG. 2

"Common Sense" Cannot Be A Substitute For A Missing Limitation That Goes To The Heart Of The Claimed Invention

In cases in which "common sense" is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense must be searching. And, *this is particularly true where the missing limitation goes to the heart of an invention*.

Arendi S.A.R.L. v. Apple, Inc.,
832 F.3d 1355, 1362-63 (Fed. Cir. 2016)

Petitioner: Tarpenning's Dragging And Dropping Hot Key 82 To Assign A "Hot Key" Function To It Is Activation By Gliding Away
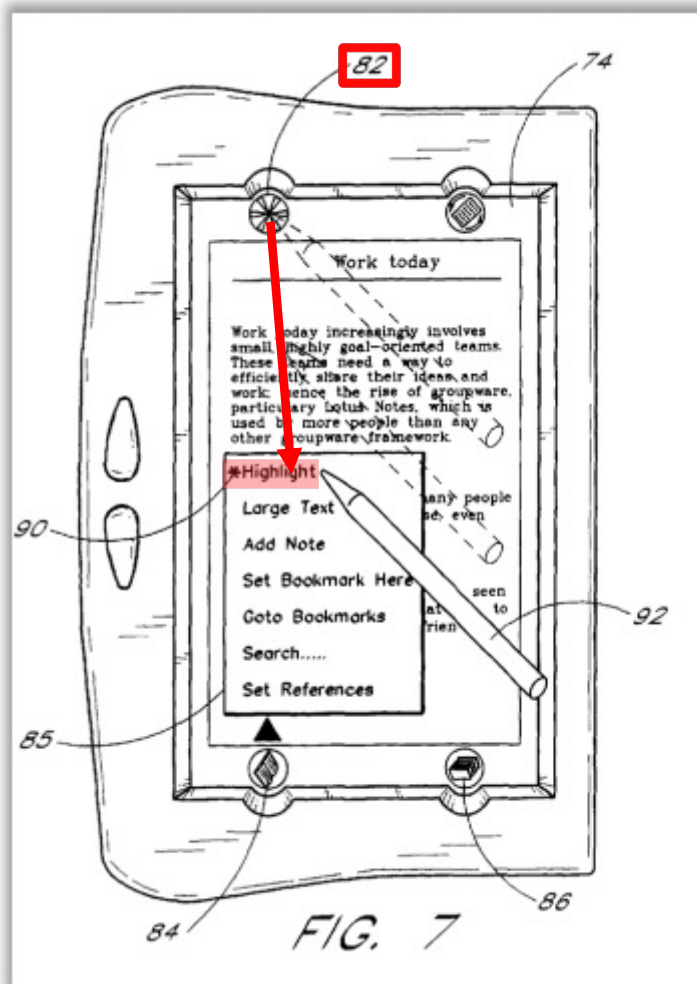

Neither "Activation" Nor "Gliding ... Away"

Tarpenning: A Custom Function Can Be Assigned To Hot Key 82 By Dragging The Key To The Desired Function

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

138. Key 82 in Tarpenning is a hotkey, which means that a user can assign a custom function to it. Ex. 1009 [Tarpenning] 6:36-38. The user can assign a specific function to the hotkey by dragging the hotkey and dropping it on the desired function to be assigned to it, or, conversely, by dragging the desired function and dropping it on the hotkey. *Id.*, 7:39-48, 8:1-4, Abstract. For example, in a reproduction of Tarpenning's Fig. 7, a user can assign a desired function, such as "Add Note" to the hotkey by dragging the hotkey 82 and dropping it on the "Add Note" item:

FIG. 7
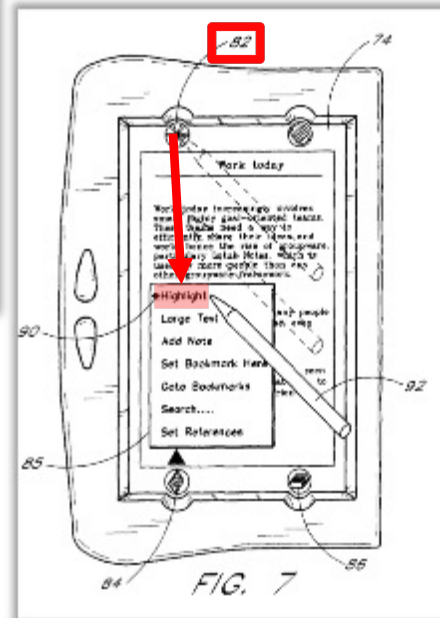
Tarpenning: Hot Key 82 Function Assignment Does Not Activate A Function, Simply Assigns A Function To Be Later Activated By Touch

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

139. Petitioner relies (Pet., 79-80) on this drag-and-drop operation to argue that Tarpenning discloses the concept of activating a key by "gliding … away." This argument fails for at least two reasons. First, this assignment procedure does not "activate" anything—it merely assigns the desired function to hotkey 82, which is then activated by the user by pressing the key, not by "gliding … away." In fact, Tarpenning never refers to its drag-and-drop operation as "activating" anything, but as, for example, "defining a function" for the hotkey. Ex. 1009 [Tarpenning] 7:39-41, 8:1-3.

FIG. 7
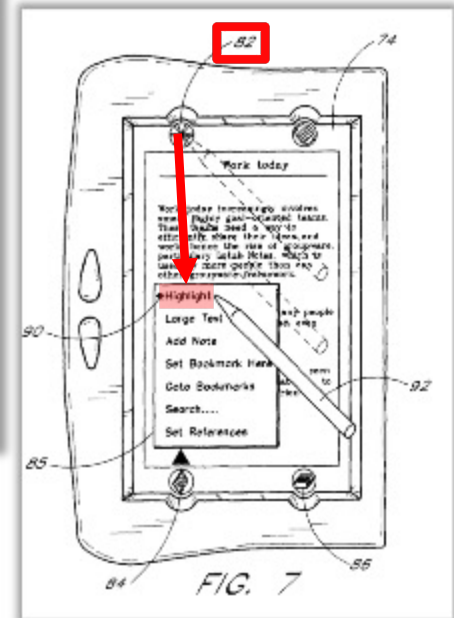
Tarpenning Refers To The Drag-And-Drop Procedure Not As "Activating" Anything, But To "Assign"/"Define" A Function

United States Patent
Tarpenning et al.

An important feature of the device is a user interface method for allowing the user to define the hotkey function using an intuitive drag-and-release technique. This method
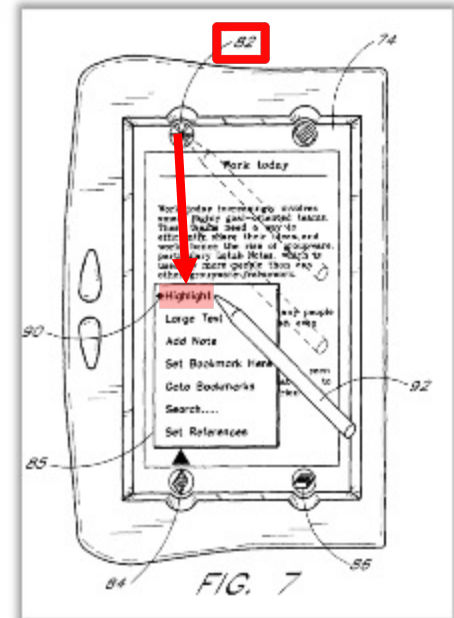
Ex. 1009 [Tarpenning] 7:39-41

In other implementations, the device **30** may additionally or alternatively be configured to allow the user to assign the hotkey function by dragging and dropping the target menu item onto the hotkey **82**. With this alternative method, the

Ex. 1009 [Tarpenning] 8:1-3

Drag-And-Drop Is Fundamentally Different From "Gliding … Away"

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

140. Second, a drag-and-drop is fundamentally different from "gliding … away." "Gliding … away" is a swipe that activates a function. In contrast, in a drag-and-drop operation, some form of the item is logically dragged (and behaves as if it is being logically dragged) with the movement of the stylus and is dropped at the location where the stylus leaves the screen. This is also confirmed by the prosecution history.

FIG. 7

Tarpenning Never Refers To Its Drag-And-Drop Operating As "Gliding" Or Anything Similar

United States Patent
Tarpenning et al.

ated with the display and management of the content. One feature is a user-definable hotkey that can be "dragged and dropped" onto a menu item to create a shortcut to that item.

Ex. 1009 [Tarpenning] Abstract

In other implementations, the device **30** may additionally or alternatively be configured to allow the user to assign the hotkey function by dragging and dropping the target menu item onto the hotkey **82**. With this alternative method, the

Ex. 1009 [Tarpenning] 8:1-4

Prosecution History: Drag-And-Drop Is A "conventional operation[]" "distinct[]" From "novel touch-and-glide"

RESPONSE TO OFFICE ACTION

Some distinctions between claimed invention and Hoshino		
	Claimed invention	**Hoshino**
Objective	Novel touch-and-glide user interface operation	Discriminate between two conventional operations; namely, (1) touch, and (2) drag-and-drop

Ex. 1002 [Prosecution History] 497

Prosecution History: Reference Does Not Disclose Gliding Away. Instead, It Discloses Drag-And-Drop

RESPONSE TO OFFICE ACTION

Hoshino does not teach gliding a finger away from an icon. Instead, Hoshino teaches a drag-and-drop operation for moving an icon. In

Ex. 1002 [Prosecution History] 498

"***Critically, the very next sentence begins with the word instead***, and states, '[i]nstead, the Candelore patent discloses pointers that point to the location of encrypted portions of the video data *relative to the file*. … **[W]e find no other way to interpret the applicants' arguments.** …."

Hulu LLC v. DivX LLC
IPR2021-01418, Paper 15, 23-24 (Mar. 15, 2022)

Subsequent "No Duplication Or Relocation" Limitation Added Only For Clarification After Claims Were Already Allowed

Claims Allowed June 7, 2011

Allowable Subject Matter

Claims 1-14,18,48-49 are allowed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language.

This claim is an omnibus type claim.

Response to Arguments

Applicant's arguments, filed 6/30/2010, with respect to claims 1-14,18 have been fully considered and are persuasive. The rejections of claims 1-14,18 have been withdrawn.

Ex. 1002 [Prosecution History] 565-567

Examiner Amendment: Dec. 1, 2011

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marc Berger on 10/6/2011.

The application has been amended as follows:

1. (currently amended)   A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

        a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.

Claims 1-14,18,48-49 are allowed.

Ex. 1002 [Prosecution History] 608-611

Petitioner's Expert Declined To Address Any Of Neonode's Tarpenning Arguments In His Second Declaration

Even If Drag-And-Drop Were "Gliding … Away," Petitioner's Proffered Motivation To Modify Tarpenning Is Unsupported

PETITION

A POSITA would have been motivated to substitute a touch operation on book menu key 84 and library menu key 86 with Tarpenning's disclosed touch-then-glide gesture to activate the function of displaying book menu 85 and the library menu, respectively, to prevent users from accidentally opening the menu when they inadvertently touch the screen with their finger or heel of their hand, which would lead to frustration. Ex-1003, ¶221.

FIG. 2
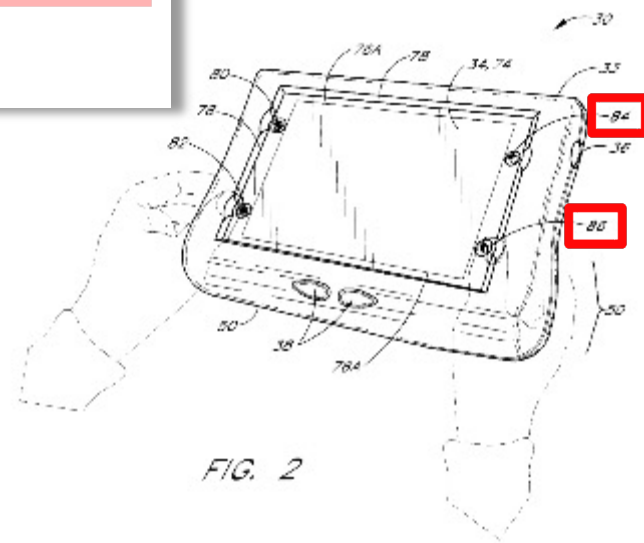
Petitioner Does Not Even Attempt To Prove That There Was Any "Accidental Activation" Problem In Tarpenning

"Arctic Cat claimed that there was a blockage problem with the Sunsdahl air inlets and that Sunsdahl's air intake was open to the sky, creating a problem with rain and snow ingestion. *The Board rejected these arguments because Arctic Cat failed to prove that these alleged problems with Sunsdahl existed such that a skilled artisan would been motivated to combine Sunsdahl* with the other prior art to overcome those alleged problems. In this case, *Arctic Cat tried to create a problem with the prior art in hopes of creating a motivation* to combine references, but it failed. …. *Arctic Cat's case was doomed when it failed to prove the premise it offered for combining Sunsdahl with Suzuki*."

Arctic Cat Inc. v. Polaris Indus.,
795 Fed. Appx. 827, 833 (Fed. Cir., 2019)

Unrebutted: Tarpenning Keys Are Physically Double Recessed, Making Accidental Activation Unlikely

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

145. First, Petitioner fails to prove that accidental activation is even a problem in Tarpenning. Nothing in Tarpenning hints at an accidental activation concern. Tarpenning's touch-sensitive display is recessed within a hard housing. Ex. 1009 [Tarpenning] 6:4-6. The four keys in question are further recessed within semicircular cutouts within the hard casing. *Id.*, Figs. 2, 6-7. Accidental activation of keys within this structure is unlikely.

FIG. 2
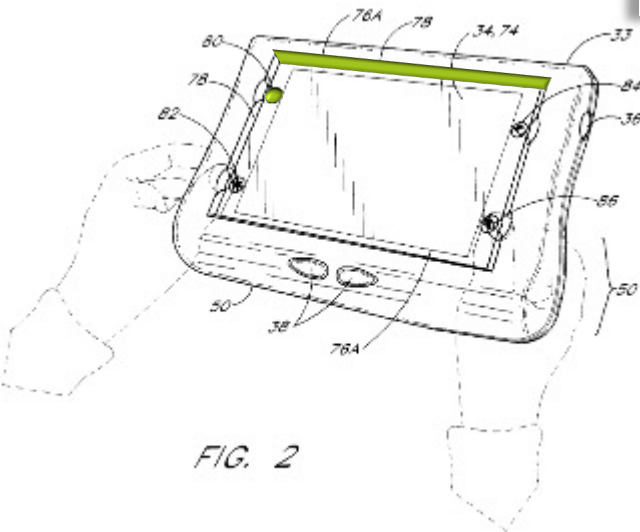
Even If Accidental Activation Were A Problem, No Explanation Is Given As To Why A POSITA Would Look To "Gliding … Away" As A Solution

"*Even if a [POSITA] would have recognized that there would be a negative interaction* between the enteric coating and the drug core, the district court found that it *would not have been obvious to try applying a water-soluble subcoating as a means of solving that problem.*"

In re Omeprazole Patent Litig. v. Apotex Corp.,
536 F.3d 1361, 1380 (Fed. Cir. 2008)

Tarpenning's Own Touch Activation Is Faster, Simpler and Physically More Convenient To The User

"***The Board must weigh the benefits and drawbacks of the modification*** against each other, to determine whether there would be a motivation to combine."

Arctic Cat Inc. v. Polaris Indus., 795 Fed. Appx. 827, 833 (Fed. Cir., 2019)

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.
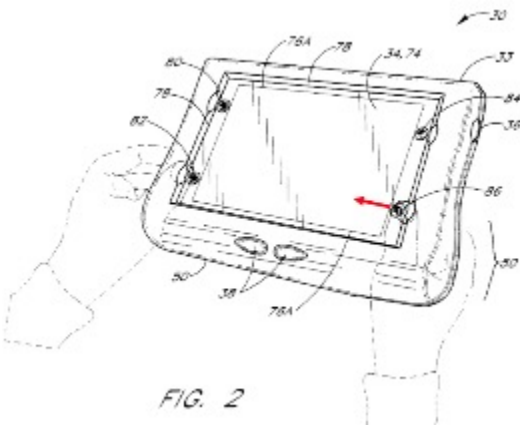
"[A]ctivating a key with a ***simple touch is a simpler design and easier in Tarpenning's context*** than "gliding … away." Tarpenning is a two- handed device and performing a ***"gliding … away" with a finger*** (Ex. 1009 [Tarpenning] 7:44-48) ***would require the user to extend his/her thumb uncomfortably***."

FIG. 2

Ex 2019 [Rosenberg-2nd-Decl.] ¶147; *see also id.* ¶150

# Petitioner's Second Motivation Is Similarly Unsubstantiated

PETITION

A POSITA would have also been motivated to implement Tarpenning's touch-then-glide activation to activate the menu display functions of menu keys 84 and 86 to allow users to more accurately open sub-menus by gliding up to the desired sub-menu location without lifting the stylus or finger off the screen, which results in faster, more efficient operations for a user. Ex-1003, ¶222; *see* Ex-1017

FALSE   FALSE

Pet., 82

What Petitioner Proposes: User Must Keep Finger On The Device To Glide Through Menus While Deciding What To Select

FIG. 2
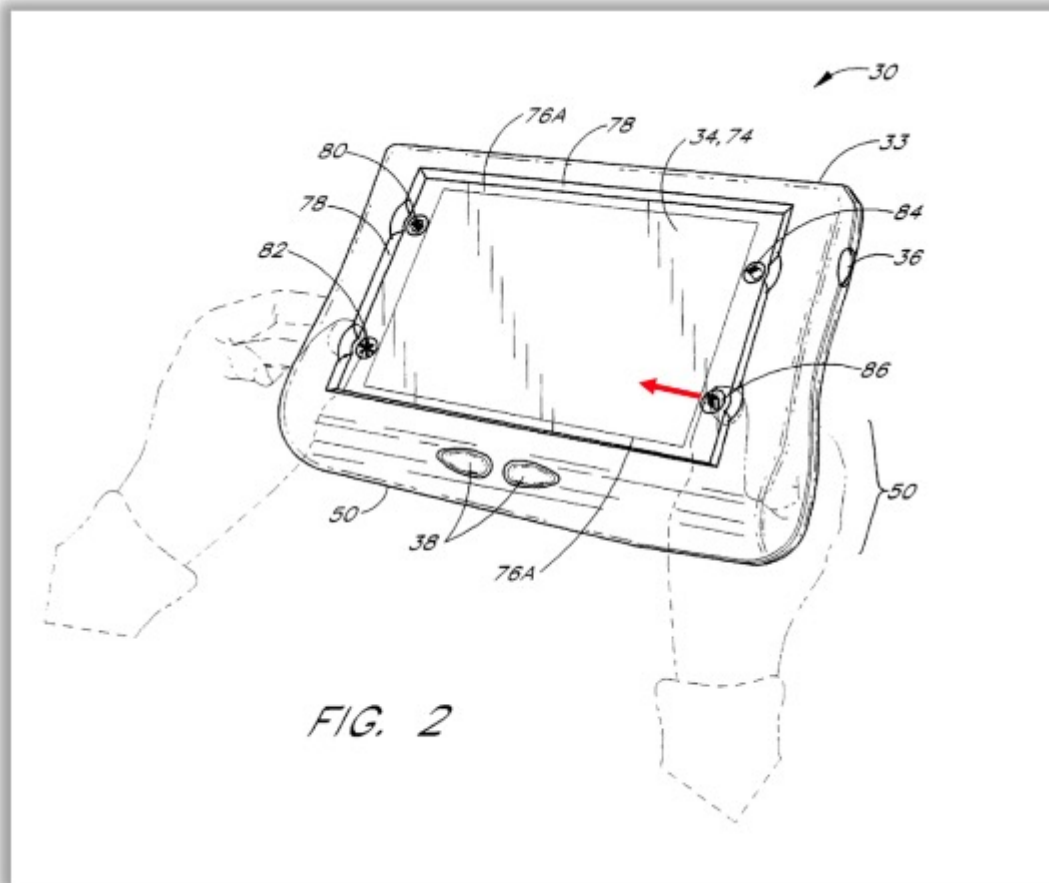
Petitioner's Proposal Is Physically Taxing And Not User Friendly

FIG. 2

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

151. Petitioner's proposed modification is also less user-friendly. A typical use scenario is where the user is holding the device with one hand, and then trying to navigate the menus with a stylus in the other hand. Once the stylus touches a key and moves towards the screen in order to open the menu (per Petitioner's modification), the user would then have to keep the device in one hand, and maintain the stylus in the same position on the screen with the other hand, while the user reviews the menu items to choose the particular options he/she wishes to choose. In contrast, in touch activation, the user simply touches the key, and then can lift his/her hand/stylus from the screen while contemplating the next steps.
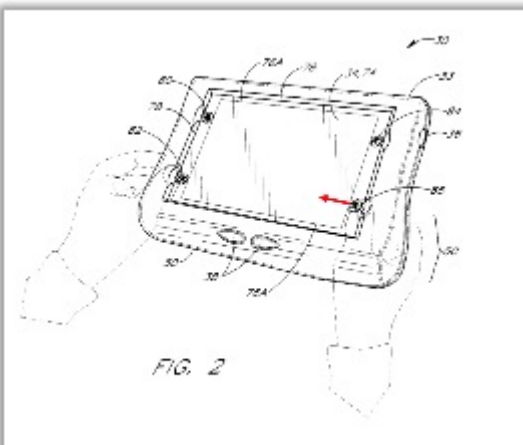
It Is Well-Known That Tarpenning's Own Touch Activation Is The Fastest, Simplest Method Of Activation

SECOND DECLARATION OF CRAIG ROSENBERG, PH.D.

150. Furthermore, it is well known in the human factors community that touch activation of an icon is typically the fastest means of activating an associated function, and it would be here as well.

Reserve

Robertson's "Insert" Gesture Does Not Activated <u>The</u> Function That Is Represented By The "Representation Of A Function"

Patent No.: **US 8,095,879 B2**

1. A non-transitory computer readable medium storing a computer program with computer program code, which, when read by a mobile handheld computer unit, allows the computer to present a user interface for the mobile handheld computer unit, the user interface comprising:

a touch sensitive area in which a representation of a function is provided, wherein the representation consists of only one option for activating the function and wherein the function is activated by a multi-step operation comprising (i) an object touching the touch sensitive area at a location where the representation is provided and then (ii) the object gliding along the touch sensitive area away from the touched location, wherein the representation of the function is not relocated or duplicated during the gliding.
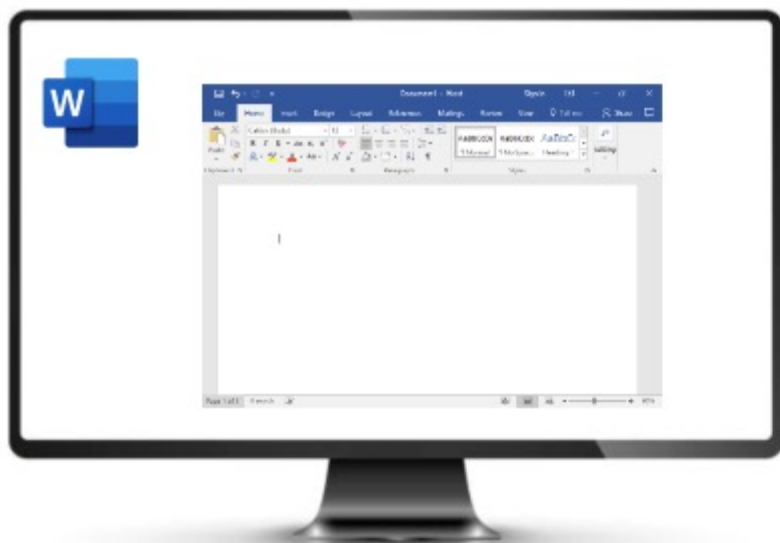
Robertson's "Insert" Does Not Activate The Represented Function (*e.g.*, Phone), But Opens The Edit Menu Of Any XButton
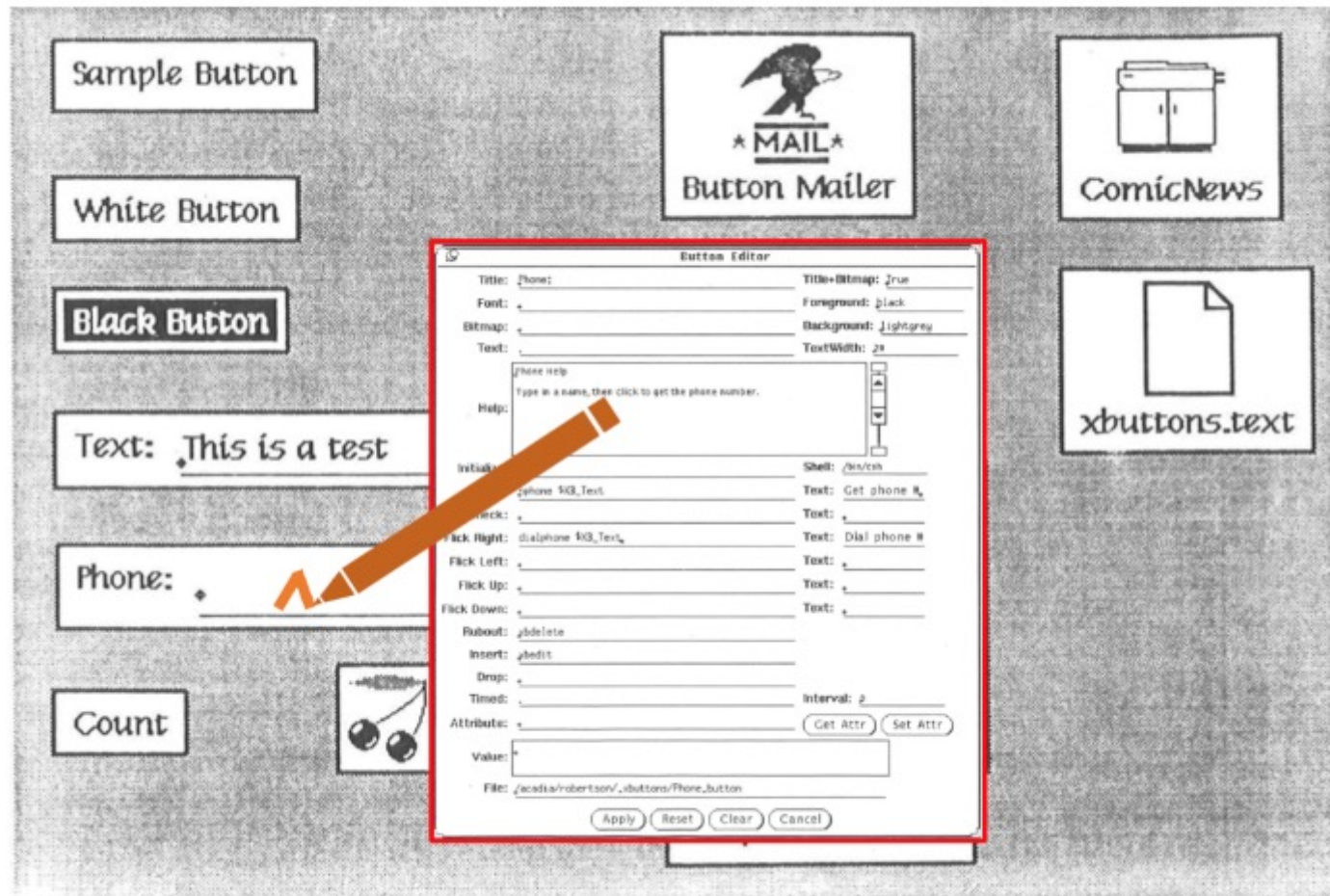
"Insert" Is Similar To Mouse Right-Click To Edit An Icon On The Screen

Robertson's Insert, Similar To Mouse Right-Click, Does Not Activated The Represented Function Of An Icon

MS Word Icon's Function Is Activated By Opening A Word Processing Window

MS Word Icon's Function Is Not Activated By A Right-Click To Edit The Icon

Reply's Argument That Editing An XButton Represents A Function Of That Button Is Contradicted By The Petition

Petition: Phone XButton Represents "Only A Phone Function"	Reply: Phone XButton Also Represents Button Editor Function
"The *location of the 'Phone' button (representation) includes* <u>only</u> *a phone function* and not touch functionality for a different function, e.g., printing."	"The *phone button represents the phone button editor function* because the insert gesture on the phone button activates *only* the phone button editor and is specific to that button."
Pet., 46	Reply, 12

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following documents were served

by electronic service, by agreement between the parties, on the date below:

**PATENT OWNER'S DEMONSTRATIVE EXHIBITS
(EXHIBIT 2063)**

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Respectfully submitted,

 /William Katz/
 _____

Date: October 12, 2022